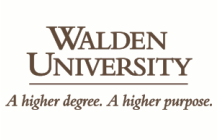

2018

The Effects of Foreign Direct Investments on Oil Sands Industry Development in Canada

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This is to certify that the doctoral dissertation by

Kolawole Ilesanmi

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Abstract

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MSc, Lagos State University, Ojo (Nigeria), 2004

MBA, Federal University of Technology, Akure (Nigeria), 2001

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

The apparent decline in conventional crude oil reserves creates concern about how to meet future global oil demand. The Canadian oil sands industry could help to fill the gap in projected world oil supply; however, the oil sands industry in Canada is operating below capacity because local investors lack the funds needed for sufficient development. Foreign direct investment could enhance the quick evolution of the oil sands industry in Canada. The purpose of this case study research was to explore the effects of foreign direct investment on the development of the oil sands industry in Canada by examining the case of a company in Alberta, Canada where foreign direct investment has occurred. The conceptual framework for this study is foreign direct investment and host country economic growth. A purposeful sampling method was used to select 15 professionals from the case study company and professionals familiar with the case from the oil sands industry and government agencies. The data collection methods involved the review of the case study company financial and production records and the use of face-to-face and telephone interviews. Collected data were analyzed using the thematic analysis and percentage analysis approaches. The participants acknowledged the effects of the oil sands sector in the development of the community in areas such as increased population, infrastructural and real estate development. The participants also viewed the industry as a major contributor to the revenue of the various levels of government and an employer of labor. The benefit of the study includes stimulating more interest to the oil sands industry from the government, investors and other scholars. The study could lead to social change, as it provides opportunities for increased revenue for the government, more jobs, improved infrastructural facilities, and improved standard of living.

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Dedication

I dedicate this study to the Almighty God for His grace, good health and provision. I also appreciate my wife, Mrs. Omotola Adebola Kola-Ilesanmi for her moral, financial and spiritual support, as well as to my wonderful children- Damilola, Darasimi, and Damilare for their cooperation and understanding during the period of the program.

Acknowledgments

My sincere acknowledgment goes to the following people for their guidance and advice; the chair of my committee, Dr. Mohammad Sharifzadeh, Dr. Steven Tippins (committee member) and Dr. Roger Wells (URR reviewer).

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Chapter 1: Introduction to the Study

The primary source of income for the province of Alberta, Canada is the oil and gas industry. The oil sands contribute a larger proportion than other segments of the oil and gas industry to the revenue of the government. The oil sands also play a significant role in Alberta province and Canada as a whole due to economic value this industry creates for stakeholders. The province serves as one of the financial centers of Canada. Presently, the ranking of Canadian oil reserves in the world is third behind Venezuela and Saudi Arabia, and it occupies the fifth position among the world's largest producers of oil (Beaulieu & Saunders, 2014). The position of Canada in the global production and reserves categories creates a lacuna between the country's oil reserves and crude oil production. There is a consensus among the different stakeholders that the country's oil sands development requires a huge capital outlay that is hard to generate within the economy (IHS team, 2014). Because of the lack of internal capacity on the part of the local investors, the business community believes the solution to the inadequate funding is to encourage inflow from outside the country. The thinking of the proponents of foreign direct investment is that its use as a source of financing for the development of the oil sands industry will boost the country's early attainment of the oil production forecast before the year 2035 (Timilsina, LeBlanc, & Walden, 2005).

The impact of the study on positive social change is in the areas of the spillover effects on the economy. There are many economic benefits associated with the development of the oil sands. The development of the oil sands would impact employment and generate more revenue for the three tiers of government. The economic

benefits also include the creation of more jobs, the improvement of the standard of living, and an increase in tax revenues and royalties.

In this chapter, I review the historical background of the oil sands from the early 20th century and the roles played by the First Nation people in the development of the production method for oil sands crude. In Chapter 1, I also consider the problem of the dwindling conventional crude oil reserves and the effects of the uncertain political terrain in the Gulf region on global crude oil production. This was a qualitative case study that consisted of data collection techniques such as interviews and document analysis. The conceptual framework that guided the research is the connection between foreign direct investment and economic growth. Finally, in the chapter, I examine the study's conceptual framework as it concerns the creation of tangible and intangible assets, employment, and transfer of technology to the host country.

Background of the Study

The discovery of the oil sands dates back to the early 1900s as the sector recorded a couple of failed oil wells during the period (University of Alberta, 2013). The period also witnessed the adoption of the First Nations people's (Aboriginal people in Canada that are not either the Métis or Inuit) method of using hot water to separate the oil sands (University of Alberta, 2013). There were many attempts to refine the oil sands in the early 20th Century; however, Clark recorded the first breakthrough in 1926 with research on bitumen that perfected the hot water separation method (University of Alberta, 2013).

The large-scale development of the Alberta oil sands started over four decades ago with the elaboration of a policy by the Alberta government; the strategic direction

changed the business landscape and turned the industry to become the largest energy investment globally (Paskey, Steward, & Williams, 2013; University of Alberta, 2013). Two companies started the commercial exploration of the oil sands in 1970; the operators were the Great Canadian Oil Sands (now known as Suncor Energy Inc.) and Syncrude Canada Ltd. (Paskey et al., 2013). The number of operators has increased due to the various developments witnessed in the sector over the past 40 years.

Canada has a vast oil reserve that is third in the world oil production ranking after only Venezuela and Saudi Arabia (Beaulieu & Saunders, 2014). The oil sands reserve is about 13% of total global oil reserves (Alberta Government, 2014). The oil sands represent about 97% of the total oil reserves in Canada, which is about 174 billion barrels reserves (Alberta Government, 2014; Beaulieu & Saunders, 2014). The current oil sands production stands at approximately 1.9 million barrels of oil per day (Alberta Government, 2014; Beaulieu & Saunders, 2014). The energy sector contributed over 22% of the province's GDP in 2012 (Alberta Government, 2014). The Alberta Chamber of Resources projected that with an investment of between $21 and $25 billion, the production figure of the oil sands sector could triple over the next 25 years (Alberta Government, 2014). The global crude oil production forecast would likely place Canada in the fourth position in the world crude oil production after the Saudi Arabia, the United States, and Russia before 2035 (Timilsina et al., 2005).

The growing concern within the business community is that the anticipated production growth requires substantial capital (IHS team, 2014). The Canadian oil sands industry needs a massive inflow of funds beyond the capacity of the local investors

(Beaulieu & Saunders, 2014). The country needs an inflow of capital to develop its enormous oil reserves to meet the deficit in oil supply due to the waning availability of conventional oil (Chindo, 2015; IHS team, 2014). The Conference Board of Canada report also alluded to the fact that the country's oil sands reserves need massive capital outlay that investors could not raise internally. In the same vein, Beaulieu and Saunders (2014) believed that the oil sands industry is capital intensive and requires an advance investment and long-time projection to recoup a significant return on investment. The general concession is that the lack of internal capacity to generate the capital required for the development of the oil sands creates an opportunity for foreign direct investments.

A number of researchers have pointed to factors favoring foreign direct investment in the oil sands industry in Alberta. Timilsina et al. (2005) asserted that foreign direct investment would enhance the growth of the oil sands, as well as the early achievement of the oil production target. They also argued that Canada has exceptional features such as the undeveloped oil reserves, political stability, as well as real investment policies to attract foreign direct investments (Timilsina et al., 2005). Furthermore, the Alberta government's liberal tax and royalty terms, and the flexible approval process have helped the growth of the oil sands industry (Guilbeault, Dobson, & Lemphers, 2013).

The total revenue from the oil sands sector created economic benefits greater than Canada's fifth largest economy, the province of Saskatchewan (IHS team, 2014). The IHS team, 2014) report showed that in 2012, the oil sands generated C$91billion to the Canadian economy (5% of GDP). The sector also created about 478,000 jobs (3% of all

employment in Canada), which was more than five out of 10 provinces in the country (IHS team, 2014). The report projected that the future oil sands production in 2025 would be 3.8 million barrels per day.

The forecast is likely to double the present contribution of the sector to the Canadian GDP from C$91 billion to C$171 billion. In 2011, the various companies in the industry paid C$1.5 billion corporate taxes to the federal government (Guilbeault et al., 2013). The revenue generated from the oil sands industry represented 0.6% of the total federal government revenues for the 2011/12 fiscal year (Guilbeault et al., 2013). In 2012, the oil sands sector employed about 22,340 workers directly, representing about 0.13% of all Canadian jobs (Guilbeault et al., 2013). The Canadian Energy Research Institute believed the oil sands industry contributed to the employment of 390,000 workers in the operations and construction, as well as the indirect and induced jobs in 2010. The figure represented 2.3% of the total jobs in the country in that year (Guilbeault et al., 2013).

According to Guilbeault et al. (2013), the oil and gas sector contributed $73 billion total real GDP to the Alberta Province economy in 2012. The amount represented over 26% of the province total 2012 GDP. The Alberta government generated $11.9 billion in nonrenewable resource revenue, with about $4.5 billion coming from oil sands production (Guilbeault et al., 2013). The authors estimated that the royalties from the oil sands production represented 11.4% of the Alberta government revenues and accounted for 39% of the nonrenewable resources in 2011-12. They believed that the percentage of

the royalties to total nonrenewable revenue would increase to 46% in 2013-14 and 68% by the year 2015-16.

Apart from revenue to the government, oil sands development also has other associated economic benefits such as more jobs, increased tax revenues, and royalties (Guilbeault et al., 2013). The development of the oil sands industry has ripple effects on the economic activities of the province of Alberta, the government of Canada, and the world (Guilbeault et al., 2013). Paskey et al. (2013) stated that the degree of the economic impact of the oil sands in Alberta province and Canada was significant and difficult to ignore. The issues of employment, royalties, and general contributions to wealth creation provided undisputable evidence that the oil sands sector plays a major role in the country economic growth (Paskey et al., 2013). The Alberta Government (2014) indicated that the oil sands affected the jobs of 112,000 people across the country outside the province of Alberta and that the figure was expected to increase to over 500,000 jobs over the next 25 years. There is also the view that the oil sands investment indirectly affected sectors such as professional services, oilfield services, manufacturing, wholesale trade, financial services, and transportation (Alberta Government, 2014).

The oil sands play a significant role in Alberta province, Canada, and the entire world (Alberta Government, 2014). Though the production of the oil sands is a private sector driven, the government regulates it through policies and laws. The argument in the government quarter is that the oil sands development benefits not only the province but all Canadians through employment opportunities, as well as generating of royalties and tax revenue for the government (Alberta Government, 2014). According to the Alberta

Government (2014), Alberta's upstream energy sector, which includes the oil sands, conventional oil and gas, and mining, employed about 121,500 people in 2012. The royalties from the oil sands were $3.56 billion in 2012-2013. The report projected the province's revenue from fees at around C$350 billion and C$122 billion in provincial and municipal tax over the next 25 years from the oil sands. On investment, the estimated total capital investment required in the oil sands sector is around $207 billion over the 2013-2022 period (Alberta Government, 2014). The Alberta Government (2014) report stated that every dollar invested in the oil sands created about $8.00 worth of economic activity, and that one-third of such investment occurred outside Alberta's borders–in Canada, the United States, and around the world.

There are economic benefits associated with the development of the oil sands, and investment in the sector could drive the technological advancement required in producing economic and environmentally friendly crude oil (Paskey et al., 2013). The inflow of significant funds, including foreign investment, impacts the financial and capital markets (Paskey et al., 2013). Paskey et al. (2013) argued that the pro-foreign capital position of the country's business community, as well as its stand on the reduced government regulation, would influence economic growth. Giesy, Anderson, and Wiseman (2010) and Mech (2012) stated that with the expected rise in world oil demand to 105 million barrels per day, the Alberta oil sands industry has a role to play in filling the future gap between the global supply and demand of crude oil. Though the concept of foreign direct investment is not new to the Canadian oil and gas sector as investors from the US participated in the first crude oil investment syndicate in western Canada in 1947 (HIS

team, 2014). However, the oil sands industry requires more inflow of foreign direct investment for the development of existing and new projects to meet expectation regarding increase oil production.

Before 2012, the oil sands sector witnessed a few direct foreign investments such as the total or partial acquisition of controlling shares in companies operating in the industry (Guilbeault et al., 2013). During the period between 2008 and 2012, about US$27 billion in foreign direct investment occurred in the oil and gas sector (Guilbeault et al., 2013). The massive inflow of funds brought apprehension in the public domain concerning whether the government should allow the foreign investors to benefit more than Canadians from the oil sands investment. The development saw the Canadian government in 2012 reacting to the takeover of Nexen Energy by the Chinese state-owned enterprises China National Offshore Oil Corporation with revised guidelines for investments by state-owned companies in the oil sands sector. The government placed the burden of proof on the foreign investors to demonstrate how the net benefit of investment in the country would be for Canada (Beaulieu & Saunders, 2014).

Some Canadians welcomed the action of the government; however, the business community showed its displeasure towards the reactions of the government. The investment community argued that the oil sands industry required massive amounts of investment beyond which a small capital market like Canada could supply (Beaulieu & Saunders, 2014). Many also saw the action of the government as a hindrance to the flow of capital required for the development of the oil sands industry, as well as the growth of the Canadian economy (Beaulieu & Saunders, 2014). The Alberta oil reserves are

important assets to the government and the people of Canada, as well as the international community. Therefore, the focus should be on how to harness the potentials of the oil sands reserves to meet the expectation of filling the gap between supply and demand in the global crude oil.

While there are many studies on the methods of producing crude oil from the oil sands, as well as the attendant environment concerns; there is a gap in the collective understanding of the potential future benefits of the oil sands sector to the Canadian economy (IHS team, 2014). There is a need for proper knowledge of oil sands investment, models and data to measure oil sands growth, as well as the resulting inflation and currency impacts (IHS team, 2014). The primary purpose of this study is to elucidate the concept of foreign direct investment from the perspective of using it to develop the oil sands industry in Alberta province in Canada. This study should be relevant to the foreign investors looking for the opportunity to invest in the Canadian economy. The Alberta government, the Canadian government, and the United States also stand to gain from the study.

Problem Statement

The decline in the reserves of conventional oil and the uncertain political nature of the Gulf region and Nigeria pose challenges to the world energy supply (Anis & Siddiqui, 2015). With a projected global demand of 105 million barrels of oil per day in the year 2030, the focus is on development of unconventional oil (Giesy et al., 2010). The Canadian oil sands industry has the capacity to help meet the world's projected oil demand if there is adequate development in this sector. The general problem is that the

oil sands industry in Canada is operating below the full capacity because local investors cannot generate adequate funding (IHS team, 2014).

The exact problem is the lack of funding by local investors, which necessitates the call for foreign direct investment for the development of the oil sands in Canada (Paskey et al., 2013). The Standing Senate Committee on Energy, the Environment and Natural Resources (2012) advocated for foreign capital to boost the energy sector of the country, while the Energy Policy Institute of Canada (2012) argued that the country's energy industry needed foreign direct investments to support development. Burt, Crawford, and Arcand (2012) advocated continuous foreign direct investment to sustain capital investment in the sector and to develop new projects. Giaccheta et al. (2015) showed the profitability of investment in the oil sands sector and encouraged further economic studies to justify investment in the industry. This study focused on the economic effects of the foreign direct investment in the oil sands development.

Purpose of the Study

The purpose of this qualitative study was to describe the effects of foreign direct investment in the oil sands industry development in Canada by using a company as a case study. The study paradigm was the combination of the qualitative research approach and the case study research method. I used the case study technique of the qualitative approach to describe the effects of foreign direct investment on the crude oil production and technological advancement of the sample company. I examined the impacts of foreign direct investment in the oil sands industry on the standard of living of people in the city of Fort McMurray and the economy of the Canadian province of Alberta.

Research Questions

The research question is the hub of a study and plays a significant role in helping the researcher to stay focused on the goals of the study. There is a connection between the research questions, the approach, and the study design. To examine the effects of foreign direct investment on the oil-sands industry development, I created the following six research questions.

1. What are the effects of foreign direct investment on the oil sands industry development?
2. How can foreign direct investment increase the crude oil production capacity of a company?
3. How can foreign direct investment resolve the challenges of skill acquisition and technological transfer of the oil sands sector?
4. How can foreign direct investment in the oil sands industry increase the royalties and corporate taxes due to the government of Alberta?
5. How can foreign direct investment in the oil sands increase employment or job creation?
6. How can foreign direct investment in the oil sands industry improve the quality of workers, as well as translate into increased wages?

Conceptual Framework

The conceptual framework for this study is to explore the effects of foreign direct investment on the economic development of the oil sands industry. There are numerous studies on the link between foreign direct investment and economic growth in the

literature. While many scholars argued that there is a connection between the concept of foreign direct investment and global investment (Blomström, Globerman, & Kokko, 1999); others believed that there are conditions attached to such a relationship (Davies, Lamla, & Schiffbauer 2016; Zekarias, 2016). Denisia (2010), referencing Hymer (1976), stated two conditions that must exist for foreign direct investment to take place: the viability of the investment and the existence of the imperfect market.

The relationship between foreign direct investment and economic development gained particular attention with Hymer's (1976) theory. The theory examined the roles of firms in areas such as the creation and exploitation of intangible assets. Ozawa (1992) stated that the investment activities of transnational corporations helped in the process of industrial growth and development. Ozawa proposed incorporating the development of multinational corporations into a theory. Denisia (2010) grouped the theories of foreign direct investment into four categories: the theory of production cycle, the exchange rates on imperfect market theory, the theory of internalization, and eclectic paradigm theory. Many scholars believed that foreign direct investment thrives in incomplete markets; however, the major players are the firms that trade in intangible assets (Ozawa, 1992).

The concept of foreign direct investment involves filling lacuna in international investment (Hymer, 1976). It is also a process where investors gain controlling shares in firms in another country through the purchase of tangible and intangible assets (Head & Ries, 2008). Dunning (1988) remarked that there was a gap in the finance literature due to lack of focus on the role of international business in economic development. Okafor, Jegbefumwen, and Okafor (2016) believed that foreign direct investment would close the

lacuna that exists between a country's desired investment and local savings, and the gap in the government revenue target.

The concept of foreign direct investment involves the building of the socioeconomic infrastructure of the host country, and it is a vehicle for the transfer of technology (Okafor et al., 2016). In the same vein, Sakker, Khan, and Mahmood (2016) emphasized that foreign direct investment offers benefits such as the transfer of new technology to the host country, improvement in managerial skills and knowledge, enhanced productivity, and reduction in unemployment. Okafor et al. (2016) also noted improvement in the production capacity and other ripple effects as some of the gains of foreign direct investment. Davies et al. (2016) gave the spillover effects on productivity, employment, and investment as the reasons for attracting foreign direct investment. They viewed the theory of foreign direct investment from the perspective of persistent technological or learning spillovers and increased demand for locally sourced good and services. Another important aspect of foreign direct investment is ownership of the production in the host country.

Girma, Gong, Görg, and Lancheros (2015) distinguished the direct and indirect effects of foreign ownership due to foreign direct investment. While the authors agreed with the concept of the linear relationship between foreign direct investment and an increase in economic productivity, they argued that the productivity-enhancing activities depend not only on the firm but also on all the foreign companies operating in the segment. The elements that enhance the increase in local productivity include the presence of companies from other countries in the sector and the capacity to absorb the

ripple effects from foreign direct investment by the firms (Girma et al., 2015). Davies et al. (2016) believed that multinational companies use strategies such as direct sharing and imitation of special procedures by the locals to improve host country technology. In the same vein, the multinational corporations use funds through foreign direct investment to increase the demand for the goods and services produced locally (Davies et al., 2016). The inflow of funds through foreign direct investment enhances efficient operation due to the acquisition of new technology. To acquire the right technology involves a decision whether to transfer from a foreign country or develop within.

Iamsiraroj and Ulubaşoğlu (2015) stated that foreign direct investment helps transfer technological advancement, as well as introduce new production processes. The relationship also creates forward and backward integration supply chain and provides local firms the opportunity to access foreign markets (Iamsiraroj & Ulubaşoğlu, 2015). Davies et al. (2016) argued that there are conditions precedent to the positive relationship between foreign direct investment, an increase in production, and expansion of the local firm. Zekarias (2016) also emphasized the nonlinear relationship between foreign direct investment and economic development and noted that the impacts of foreign direct investment depend on strategic motives such as market-seeking, efficiency-seeking, and strategic asset seeking. Sala and Trivin (2014) acknowledged the role of foreign direct investment as a catalyst to economic development through technological transfer and funding of new investment. Zekarias (2016) believed that foreign direct investment contributes to economic development through research and development and an increase in human capital to the host country. Ozawa (1992) stated that there is a relationship

between foreign direct investment, economic development, and human capital movement between countries. In analyzing the dynamic paradigm of foreign direct investment, Ozawa argued that the concept of was an engine for economic growth. The flow of employees to the host country due to foreign direct investment impacts the standard of living of the citizens, as well as increases the tax revenue for the government (Burt et al., 2012). Ozawa (1992) emphasized that for any government to raise the standard of living of its people, it should operate an open economy to benefit from the opportunities of trade. The author argued that economic development involved a process of learning and emulating and the transfer of knowledge, skill, and technology.

There are benefits associated with the generation of employment for the local labor force, improved standard of living, and development of economic linkages. Ozawa (1992) argued that foreign direct investment creates employment or reduces unemployment. The employment effects of foreign direct investment include staffing of new facilities, increase in wages and training (Burt et al., 2012). Rizvi and Nishat (2009) stated that the positive impact of foreign direct investment on jobs creation comes through direct and indirect effects, that is, forward and backward integrations. There is a consensus on the existence of a mutual relationship between foreign direct investment and economic advancement, especially in the developing countries (Sakker et al., 2016). Denisia (2010) agreed with economists that foreign direct investment impacts economic development in all countries, with particular emphasis in the developing nations. Denisia believed that the process involved is complicated because it included issues such as employment generation, an increase in production, competition, and technological

transfer. Denisia also stated that the concept meant an increase in the exports and ease of access to international markets and currencies. Finally, Denisia argued that while foreign direct investment has positive benefits, the adverse effects might stiffen the local industries. The adverse effects of foreign direct investment include problems with the application of economic policies by the host countries, as well as alignment of the economic policies of the receiving countries with the global market (Forte & Moura, 2013).

Nature of the Study

I used the case study design of the qualitative research method. In this study, I described the practical situations of a company that had foreign direct investment in the industry. I considered the pre and post effects of foreign direct investment in the selected company. Through my analysis, I determined the contribution of foreign direct investment in the development of oil sands, as well as the economic impact of the oil sands to the growth of the Alberta government economy. I used the case study sampling strategy to select the participants.

The research site is Fort McMurray, a city in Alberta province, Canada, and the selection of the members was from the oil sands sector, academic environment, and government agencies. My study protocol involved using various techniques for the collection and processing of data. I collected data for the study by looking at the records of the selected company and various reports on the oil sands from the government and individuals. I also used face-to-face interviews and participants' telephone interviews during the study. I used data collection procedure that includes setting the research

boundaries, information gathering through interviews, company document analysis and checking of relevant documents.

Definitions

Conventional and nonconventional oil: The end product of both traditional and nonconventional drilling process is petroleum. However, the conventional oil is located underground and flow naturally through pools to the surface, while the course of producing the nonconventional oil involves techniques different from the oil well method of the conventional oil (Rajnauth, 2012). The nonconventional drilling method takes a longer process, and it is also more expensive than the conventional oil production (Rajnauth, 2012).

Foreign direct investment: Foreign direct investment in this study means any investment by government enterprises, companies, a group of investors, or individuals from another country into a firm in the host country with the primary purpose to enhance efficiency, as well as to gain controlling interest (Ray, 2012).

Forward and backward integrations: Both forward and backward integrations are strategies used by organizations to control the supply chain of their products. Whereas forward integration involves a process whereby firms exert direct authority on the distribution or supply of their products, the backward integration strategy involves the vertical incorporation of the sources of raw materials in the production chain (Rizvi & Nishat, 2009).

Nonrenewable resources: Nonrenewable resources are resources such as coal, gas or oil that are impossible to replace after the consumption of their economic value.

Oilfield services: Oilfield services are organizations that provide other services apart from petroleum exploration and production in the oil and gas sector.

Oil sands: The oil sands are comprised of the combination of sand, water, clay, and bitumen.

Royalties: Royalties are payments made by the companies operating in the oil and gas industry to the government for the use of the natural resources within the country.

Upstream energy sector: The upstream energy component of the oil industry is responsible for the discovery and production of the crude oil and natural gas.

Assumptions and Limitations of the Study

I anchored this study on the following assumptions and constraints. I assumed that foreign direct investment as an instrument for economic growth would play a significant role in the development of the oil sands industry. I assumed that the participants in the study would exhibit intelligence and have the prerequisite experience to answer the interview questions as honestly and truthfully as possible. Finally, I believed that this research would produce a fair result.

I used a systematic data analysis for the management of the qualitative data. However, the use of the qualitative case study approach makes the researcher the most important instrument for the collection and analysis of data (Goulding, 2002). The use of the case study method comes with ethical concerns such as subjectivity and bias, as well as the issues of reliability, validity, and generalization of the result. To allay these concerns, I drew my data from multiple sources such as the historical records from the federal and the provincial governments, archival materials, and interviews with

practitioners (Yin, 2009). I also adopted member checking strategy, and the internal and external validity techniques (Yazan, 2015; Yin, 2009).

Scope and Delimitations

The scope of the study centered on how foreign direct investment would impact the development of the Canadian oil sands industry. During the study, I collected and analyzed various data to show this impact. The source of the primary data for the study was responses from the interview participants and from the company that I used as the case study. The study suffered most of the limitations of the qualitative research approach. The difficulty associated with the gathering of sensitive information about the company under the case study through structured data collection procedure. The problem in generalizing the result of the study due to the nature of the research process and design. Finally, there was also a limitation due to loss of information during the process of converting data to numbers. In addition to the use of primary data, I used other potential secondary sources such as the federal and provincial governments and Canadian Energy Research Institute.

Significance of the Study

The primary purpose of this study was to expand the concept of foreign direct investment from the perspective of using it to develop the oil sands industry in Alberta province in Canada. The study is relevant to the Alberta region, other Canadian regions, and the United States. The economic impacts of the oil sands development include the creation of increased revenue for the government, more jobs, and an improved standard of living.

Significance to Theory

The study could be an opportunity to showcase the relevance of the theory of foreign direct investment to the oil sands industry.

Significance to Practice

The study may provide the basis that allows the investors to see the vast potentials in the oil sands industry despite the negative propaganda the industry has received in recent years.

Significance to Social Change

The study may lead to social change, as foreign direct investment in the oil sands would provide opportunities for many stakeholders. Paskey et al. (2013) highlighted the likely ripple effects of foreign direct investment on the oil sands, such as the increase in oil production and transfer of skills and technologies.

Summary and Transition

In Chapter 1, I presented a general overview of the effects of foreign direct investment on the development of the oil sands industry in Canada. I also explained the relevance of the oil sands crude in the face of dwindling global conventional oil reserves. Although there are prospects in the oil sands sector, the issue of funding is a primary concern. To address the challenge of inadequate funding, the business community and many scholars are clamoring for foreign direct investment. In Chapter 1, I reviewed the conceptual framework of foreign direct investment, highlighting the connection between the concept and economic growth. The chapter included an examination of the relevance of foreign direct investment in areas such as the creation and exploitation of intangible

assets, closing of the gap between the demand and supply of capital, the provision of socioeconomic infrastructure, and the transfer of technological advancement.

In this chapter, I also reviewed the historical discovery of the oil sands dating back to the early 20th Century, and the contribution of Clark in the method of oil sands production. For over four decades, the oil sands sector has played a significant role in government revenue. In the year 2012, the industry contributed about $4.5 billion total real GDP to the economy of the province of Alberta, and the sector paid $1.5 billion corporate taxes to the federal government in 2011 (Guilbeault et al., 2013). The industry is also a major employer, creating employment opportunities for many people in and outside of Alberta. In 2012, the sector employed over 112,000 individuals with a projection of more than 500,000 jobs over the next 25 years (Alberta Government, 2014).

In Chapter 2, I provide a review of the relevant literature. After describing my literature search strategy, I examine the definition and concept of foreign direct investment and analyze the relationship between foreign direct investment and economic development of the host country. I also review the relevance of energy in the world economy, the global crude oil forecast for years 2030 and 2100, and the world crude oil reserves. In Chapter 2, I also explain the historical background of the oil sands and its reserves. Finally, through my literature review, I examine the role of foreign direct investment in the oil sands development, as well as the environmental issues connected with the expansion of the oil sands industry. In Chapter 3, I will discuss the research methodology for the qualitative case study, explaining the data collection method, data validation, and data analysis. In Chapter 4, I will provide the details of data analysis and

interpretation, whereas, in Chapter 5, I will discuss the findings and conclusions of the research as well as recommendations.

Chapter 2: Literature Review

The uncertainty surrounding the level of the conventional crude oil reserves, as well as the crisis-ridden nature of some of the major crude oil producing countries, necessitated the call for an alternative supply of the product (Anis & Siddiqui, 2015). With the global focus on nonconventional crude oil such as the oil sands, there is a concern about expanding the oil sands sector, which is currently operating below its full capacity. The inability of local investors to muster the necessary capital is the cause of underdevelopment of the industry. The purpose of this literature review is to examine the concept of foreign direct investment and its effects on the economic development of the host country and the oil sands industry in Canada. The organization of the chapter is as follows:

1. Definition and concept of foreign direct investment
2. Foreign direct investment and the economic development of the host country
3. Energy as the nerve center of the world economy
4. The world crude oil forecast for 2030 and 2100
5. The historical background of the oil sands and its reserves
6. Foreign direct investment and the oil sands development
7. Oil sands development and environmental issues

Literature Search Strategy

The review process involved the assembling, reading, and paraphrasing of relevant materials on foreign direct investment and the world economy and the Canadian oil sands history and development. I searched the Expanded Academic ASAP, ProQuest

Central, Sage Premier, Thoreau, and Web of Science in the Walden University Library. I also used Google Scholar, as well as the Alberta Government website, the Regional Aquatics Monitoring Program website and the Canadian Energy Research Institute website for peer-reviewed journal articles and other materials on foreign direct investment and oil sands development. I used the following key search terms to locate the resources for the review: *foreign direct investment and the host country, energy and the world economy, world crude oil,* and *projection for 2030 and 2100*. Other terms used included *historical background of the oil sands and its reserves, foreign direct investment and the oil sands development,* and *oil sands development and environmental issues.*

Conceptual Framework

Foreign direct investment involves the creation of equity participation and controlling interest by corporate or individual investors in corporations in another country through tactical investment. The International Monetary Fund defined foreign direct investment as taking a strategic investment position in firms operating in other nations by investors with a view of management and profit participation. Ray (2012) also defined the concept as the flow of capital from foreign investors in another country with the aim of acquiring controlling share of the assets, as well as participating in the management of the firm in the host country. In the same vein, Forte and Moura (2013) viewed foreign direct investment as the transfer of financial and nonfinancial assets by individuals or groups of investors from another country with the objectives of equity and management control.

Foreign direct investment derived its origin from the activities of multinational enterprises in the global market. The concept involves a positive relationship between foreign direct investment and world investment (Blomström et al., 1999). The idea became popular with Hymer's (1976) theory on the connection between foreign direct investment and economic growth. Ray (2012) believed the idea of direct foreign investment emerges from the principles of multinational firms' operations in the world market, as well as the liberalization policies of the developing and developed nations. The concept provides an avenue for many developing and developed countries to find sources for the funds needed to bridge the gap in domestic investment (Liargovas & Skandalis, 2012). In the global economy, private capital now flows from one country to another due to the liberalization of the world market (Ray, 2012). Many countries use foreign direct investment to fill the lacuna in the foreign exchange, investment, and tax revenues (Anyanwu, 2012). Foreign direct investment also serves to bridge the gap between savings and investment in many host economies (Saqib et al., 2013). According to endogenous growth theory, there is a positive relationship between capital accumulation (investment) and economic growth in the long run (Hassen & Anis, 2012). Where there is a shortfall in domestic savings, most countries rely on foreign capital to finance investment projects. The significance of capital inflow from other nations makes foreign direct investment important in global economic growth (Hassen & Anis, 2012).

Literature Review

In the international business world, the foreign direct investment is an important phenomenon. According to Melo and Quinn (2015), the transactions involving foreign

direct investment increased from about $2 trillion in 1990 to $19.1 trillion in 2010, with the developing economies benefitting more than the developed countries. Dua and Garg (2015) classified the determinants of foreign direct investment into microeconomics and macroeconomics theories. Microeconomic theories deal with factors internal to the firms in making decisions, while macroeconomic theories focus on a variety of national economic policies such as inflation and pricing levels, growth rate, national income, and gross domestic product. The macroeconomic theories include features such as the size of the market, infrastructure, labor cost, cost of capital, exchange rate, foreign interest rates, and economic performance (Dua & Garg, 2015). The market size of the host nation influences foreign direct investment flows. There is a reduction in the cost of production in larger markets due to economic of scale.

Foreign Direct Investment and Economic Development of the Host Country

There are conflicting results regarding the impacts of foreign direct investment in the various segments of the host country; however, many researchers revealed that inflow of funds into a system could act as a catalyst for economic growth (Sbia, Shahbaz, & Hamdi, 2014). Many scholars viewed the relationship between foreign direct investment and the economic development of the host nation from the perspectives of microeconomics and macroeconomics (Sbia et al., 2014). The positive impacts associated with foreign direct investment and its relevance in the economic development of both the advanced and developing nations can only be beneficial to investors and the host countries when certain conditions exist. There should be a conducive environment with

liberal trade policies, proper investment regulations, and economic and political stability (Acaravci & Ozturk, 2012; Blomström et al., 1999).

Since the 1980s, many countries relied on the inflows from foreign direct investment to provide a platform for economic development (Liargovas & Skandalis, 2012). There was a global surge in transactions involving foreign direct investment in the late 1980s and 1990s; the concept accounted for a significant percentage of the capital inflow to the developing countries (Acaravci & Ozturk, 2012). The relaxed policies on foreign direct investment, tax enticements, and the introduction of subsidies by most developing nations increased the level of investment activities during the period (Herzer, 2012). The world production base also witnessed a remarkable increase in the 1980s due to the activities of multinational corporations (Ray, 2012).

The general belief among government officials is that there is a positive relationship between foreign direct investment, increased productivity, and economic growth of the host country (Antwi, Mills, Mills, & Zhao, 2013). Wheras there are arguments for and against foreign direct investment and the impacts of the concept in the receiving country among scholars, there is the understanding that a positive relationship exists between foreign direct investment and economic development of the host nations (Alfaro & Charlton, 2013; Imoudu, 2012). Many countries used foreign direct investment as a strategy for promoting economic development and as a vehicle by the host countries for integration into the world economy (Olayiwola & Okodua, 2013). The alleged positive relationship between foreign direct investment and the development of new technology, as well as the ability to innovate, motivate policymakers in the developing

countries in crafting rules and regulation that attract inflows of the fund (Saqib, Masnoon, & Rafique, 2013). The policymakers also use the concept to reduce the employment rate and widen the exports base of the host nations, acquire the necessary technological know-how and to build the production base of the local firms (Olayiwola & Okodua, 2013).

The developed and developing nations contributed to the popularity of foreign direct investment by creating enabling financial and political environments (Antwi et al., 2013). The policymakers of most nations have focused on market-oriented strategies that help to trigger rapid economic development, as well as offer a conducive environment for foreign direct investment transactions (Ray, 2012). Countries commonly create both policy and nonpolicy instruments to attract foreign direct investment (Anyanwu, 2012). Most nations implement policies of liberalization of the economy in areas such as trade, regulations, and taxation. Other countries offer incentives such as the privatization of state-owned companies, tax holiday and subsidies, liberalization of import and export regulations, and the introduction of acceptable financial reforms to attract foreign direct investment (Antwi et al., 2013). According to Forte and Moura (2013), foreign direct investment thrives in an economy with existing or subsequently developed features such as the right caliber of human capital, stable sociopolitical environment, and liberal economy. In the same vein, Acaravci and Ozturk (2012) stated that the positive relationship between foreign direct investment and economic growth achieved in many countries happened due to the availability of a certain level of education, technology, and infrastructure.

The position of country's infrastructural development, socio-political state, the existence of natural resources, and adequate level of human capital also contribute to the inflow of foreign direct investment (Anyanwu, 2012). The policymakers have a role to play by designing suitable policies, as well as creating an enabling environment to influence positive synergy between foreign direct investment and economic growth (Forte & Moura, 2013). There is also the classification of the push and pull factors that influence foreign direct investment. While the push factors consist of things external to the country receiving foreign direct investment, the pull elements are the socioeconomic, political and structural environments of the recipient nation (Anyanwu, 2012). Though, the low cost of production is one of the primary reasons for foreign direct investment; however, in the case of China, the vast foreign currency reserves play a significant role in investment in other countries (Quer et al., 2012). Investment in other nations is also perceived as a way of ensuring a continuous growth of China's economy (Quer et al., 2012).

Anyanwu (2012), quoting from Dunning (1993), classified the objectives of foreign direct investment into four groups of resources (materials, labor, and infrastructure), market, productivity, and strategy (research and development, and technology improvement). In the same vein, Quer, Claver, and Rienda (2012) considered incentives such as the quest for resources, market, and strategic asset as the main reasons behind the growth of Chinese outward foreign direct investment. According to Narula and Driffield (2012), the opinion that foreign direct investment encourages growth in the host countries revolves around the concept that multinational enterprises have firm-

specific assets that give them "ownership-specific advantages." These benefits impact areas such as improvement in the production process, availability of current technology, latest techniques of governance, better knowledge of the markets, and capital creation (Narula & Driffield, 2012). The authors argued that the multinational enterprises derive these advantages due to the location of their plants in several countries, access to a variety of information, business dealings with many suppliers and customers, and easier access to capital.

Foreign direct investment is an important part of global economy, as it drives employment, technological transfer that causes an increase in production, and ultimately enhances economic growth (Anyanwu, 2012). The concept contributes to ease the constraints of domestic savings, investment and foreign exchange of host countries (Herzer, 2012; Imoudu, 2012). It also impacts the real sector of the economy through an increase in wages and salaries, employment, a decrease in products' prices and taxation/royalties due to the government (Herzer, 2012; Imoudu, 2012). In the same vein, foreign direct investment helps to promote capital growth, increases the productivity of the local firms, enhances the best management practices, develops human capital, and transfer of technology and innovation in approaches (Hassen & Anis, 2012; Sbia et al., 2014). Apart from aiding the overall development of the host nations, Acaravci and Ozturk (2012) believed that foreign direct investment assists in providing funds required for capital projects, filling the gaps in host country's domestic private investment, creating new jobs and human capital development.

The other positive effects of foreign direct investment include the transfer of management knowledge, employment creation, process improvement, and enhancement of competition among local and overseas firms (Imoudu, 2012; Saqib et al., 2013). Foreign direct investment also assists to kick-start the economic development of the host nations (Alfaro & Charlton, 2013). According to Ray (2012), foreign direct investment increases export trades, supports backward and forward integration agreements, and introduces modern management best practices.

A consensus between the policymakers and scholars is that there is an impact from foreign direct investment in the economy of the host country (Narula & Driffield, 2012). The concept links with terminologies such as externalities, spillovers, and linkages. Externalities are byproducts of the actions of the multinational enterprises available to the host nation firms without payment; while spillovers are part of externalities that involve the transfer of benefits between a multinational company and another business in the host country. Though all spillovers are part of externalities, all externalities are not spillovers, due to benefits accruing to companies not directly involved with a multinational enterprise (Narula & Driffield, 2012). The transaction that occurs with another firm in the host economy outside direct business dealing with a multinational company is a linkage. While stating the controversial nature of the connection between foreign direct investment and the host nation economic development among scholars; He, Gao, and Wang (2012) acknowledged the decisive role of the concept as concerning China's economic growth in the areas of technology spillovers and industrialization of the country's real sector. The positive relationship between capital

formation, improvement in technology, and economic growth makes the foreign direct investment a significant tool in the economic development of host nations (Forte & Moura, 2013). Apart from enhancing the growth of the host country, foreign direct investment helps to fortify the global trade and financing (Malhotra, 2014). The ripple effect from the investment also affects the host country economy through human capital development and technology transfer (Narula & Driffield, 2012).

Though evidence abounds of the impacts of foreign direct investment, the introduction of the concept into the global economy met initial resistance from some developing countries due to perceived suspicion (Hassen & Anis, 2012). Many of the developing nations believed the multinational enterprises represented capitalism and neocolonialism, agents of underdevelopment and capital flight, as well as the perceived political and economic threats (Narula & Driffield, 2012). Some of the policymakers in the developing countries saw the foreign direct investment strategy as parasitic and antigrowth of the domestic industries (Imoudu, 2012). However, the perception in the developing nations has changed due to a better understanding of the associated externalities to the concept, with policymakers now promoting policies to attract foreign direct investment (Hassen & Anis, 2012; Imoudu, 2012).

Even with a positive sign of support from many countries for inflow of funds from multinationals and private investors; there are usually resentments concerning investment from the state-owned institutions due to alleged political objectives of the investing country (Quer et al., 2012). There is also the issue of the quality of benefits derivable from foreign direct investment projects. A school of thought believes that some

foreign direct investment projects add more value to the host economy; therefore, the policy-makers craft rules aimed at attracting profitable investments while control others that are termed less necessary (Alfaro & Charlton, 2013). The classification of projects into valuable and non-valuable by the policymakers is on the premise that the economic development of the host country due to the inflow of investment differs from one industry to another (Alfaro & Charlton, 2013).

Despite the many types of research on the connection between the impact of foreign direct investment and economic growth, there are still questions about the effects whether positive or negative (Forte & Moura, 2013; Narula & Driffield, 2012). While many scholars agreed that a positive relationship exists between foreign direct investment and economic growth, some writers believed that the concept impacts negatively on the host country economic development (Forte & Moura, 2013). There is an argument that although the relevance of foreign direct investment is on the increase in global economy, its presence in the developing countries is not as pronounced as in the advanced nations despite the liberalized policies introduced by many developing countries (Liargovas & Skandalis, 2012). The reason for this is that investors are willing to invest in an economy that supports large-scale production, with exchange rate stability, political stability, human capital development and favorable taxation (Liargovas & Skandalis, 2012).

In the same vein, Acaravci and Ozturk (2012) stated that though, foreign direct investment is attractive and less unstable unlike other investment packages that come with stringent conditions, there are shortcomings associated with the concept. Some of the disadvantages include capital flight, and unfavorable business terms and conditions

(Acaravci & Ozturk, 2012). A few skeptics also believed that the policy reduces capital accumulation, makes technology and skill transfer difficult, and causes a reduction in the production activity of the host countries firms (Herzer, 2012). The over-reliance on foreign direct investment creates economic and political pressures on the domestic companies, as well as the policymakers in the receiving nations (Malhotra, 2014).

Despite the perceived shortcomings of foreign direct investment, the general belief is that nations with strong per capita income, highly educated workforce, stable financial system and liberal trade policies stand to gain more from the concept (Herzer, 2012). One sector of the world economy that has attracted much attention is the energy sector. According to Khatuna and Ahamad (2015), the massive capital required, as well as the technology gap in the energy industry necessitates the focus on foreign direct investment.

Energy as the Nerve Center of the World Economy

Energy is an outstanding product that has a considerable economic value. The relevance of energy became the world focus due to the shortage of the oil provision in the 1970s (Saidi & Hammami, 2015). The global attention has since shifted to the delivery of reliable supply and the efficient use of the product. Saidi and Hammami (2015) stated that energy was essential for the growth and survival of both the developed and developing economies.

IHS CERA (2012) viewed power as the lifeblood of the world economy. Energy plays a significant role in every aspect of the present world. The product impacts the economy, as well as the living standards of the human race. The industrial sector relies on

heat, light, and power for efficiency while countries can provide essential amenities due to the availability of adequate supply of energy. IHS CERA report stated that the energy sector provides the podium for the growth of the global economy and that the emerging markets' continual growth requires a constant and adequate supply of energy product.

IHS CERA (2012) believed that there were two ways the energy sector aids the world economic development. First, through employing the people and value creation such as mining, transforming and distribution of energy products (IHS CERA, 2012). Second, the report argued that energy was the bedrock of the global economy as it serves as an input to many sectors. The development of energy resource is an avenue for wealth creation and economic buoyancy for the host nation (IHS CERA, 2012). Tang and Tan (2014) analyzed the relationship between financial development, energy, economic efficiency and growth in Malaysia. The authors argued that a developed financial system enhances easy access to the fund, which in turn increases the purchasing power of the citizens on items such as the electrical home appliances, machines, automobiles, and houses. The use of these objects leads to the consumption of energy. In the same vein, Sehrawat, Giri, and Mohapatra (2015) believed a developed economy enhances power consumption that leads to an increase in manufacturing activities, and which creates a platform for economic growth. Energy drives the economy of Malaysia, and the country energy consumption is the second highest among the five founding members of the Association of Southeast Asian Nations (ASEAN) economies (Tang & Tan, 2014). However, the nation's high energy intake is due to its focus on agriculture and mining

that translates into many industrial countries relying on Malaysia for the supply of primary products and raw materials (Tang & Tan, 2014).

Although the stage of energy usage depends on the level of economy development; Mahalik and Mallick (2014) argued that a country that grows at a faster rate require more power. The authors believed that power consumption facilitates mechanization, urbanization, and transportation that are necessary for economic development. The lack of access to the adequate level of it has associated challenges such as erratic power supply that hinder the growth of the industrial sector, lack of appropriate security and agricultural problems.

The advancement of a country has a connection with the economic growth; the production and consumption activities are factors that facilitate economic development. The level of energy consumption constitutes a factor in the country manufacturing process, as well as a necessary force required to drive the growth of the nation's economy (Saidi & Hammami, 2015; Siddique & Majeed, 2015). The energy consumption of a country plays a significant role in the economic development (Saboori et al., 2014). There are ample studies that revealed the synergy between energy consumption and accelerated growth in the economy (Sadorsky, 2012; Saidi & Hammami, 2015). The high demand for power consumption is a fall out of the fast economic development of the emerging countries. Mahalik and Mallick (2014) analyzed the importance of energy to the emerging economies from the perspective of the scarcity of the product and the pace of growth of the economies. The authors quoted the International Energy Agency (IEA, 2007) forecast on energy demand between the year 2005 and 2030 to analyze the global

and emerging markets rates. With the world projected demand average growth rate of 1.8%, the developing countries have an ultimatum contribution of about 74% (Mahalik & Mallick, 2014). The IEA report indicated that China and India total energy demand growth rate within the period was about 53% (Mahalik & Mallick, 2014). In the same vein, Finley (2012) believed that the global energy consumption should increase by about 39% in the year 2032 compared to the 45% growth between 1990 and 2010. The world energy consumption on the average stood at about 1.7% from the year 2010 to 2030 (Finley, 2012).

There is a correlation between higher economic growth, the level of energy consumption and the efficient use of energy (Saboori, Sapri, & Bin Baba, 2014; Sadorsky, 2012; Saidi & Hammami, 2015). Saboori and Sulaiman (2013) stated the importance of conserving energy consumption but not to the detriment of economic growth. In most countries, energy plays a significant role in economic development (Saboori & Sulaiman, 2013). While there is an on-going debate about the linear relationship between economic growth and energy consumption, as well as the effects of pollution on the environment, there is a need for countries to implement policies that balance the level of energy use and emissions to the atmosphere (Saboori & Sulaiman, 2013). The strategy to balance environmental concerns and economic growth has attracted the production of numerous studies in the academic community since early 1990 (Shahbaz, Sbiac, Hamdid, & Ozturk, 2014). Shahbaz et al. (2014) revealed an increase in environmental deterioration when a country experiences economic growth. The

government should adopt policies that encourage energy efficient technology that produces clean energy and low CO2 emissions (Shahbaz et al., 2014).

The oil and gas industry impacts other sectors of the economy such as the refining, petrochemical, and energy (Lucky & Nwosi, 2016). The crude oil provides over 33% of the global energy needs, as well as accounts for about 95 percent of the energy required in the transportation sector (Miller & Sorrell, 2014). The US Energy Information Administration (2016) stated in its report that the United States uses more of the petroleum products in energy production than any other power source. Also, the Saudi Arabia economy uses a large quantity of crude oil for power generation (U.S Energy Information Administration, 2014). The US economy consumes about 19 million barrels per day of petroleum, representing about 35% of all energy consumption in the country (U.S Energy Information Administration, 2016). The relevance of oil products in generating energy for the world economy calls for an insight into the world crude oil forecast.

The World Crude Oil Forecast for 2030 and 2100

In projecting the global crude oil for the next few decades, it is important to consider the features that trigger the supply and demands of the product (Krehlik & Barunik, 2016). The causes that affect the supply and demand of the crude oil are the outbreak of wars in the oil producing nations, political interferences from OPEC and non-OPEC countries on production, and the prices of crude oil in the international market (Aleksandrov, Espinoza, & Gyurkó, 2013; Krehlik & Barunik, 2016). Other factors include the investors' risk appetite and the size of the oil reserves and the price of crude

oil in the global market (Aleksandrov et al., 2013). It is vital to note that rapid economic development or an unexpected surge in the global economy can also cause changes in demand volatility (Krehlik & Barunik, 2016). The relevance of the crude oil to the world economy and the peak oil theory necessitate a look at the oil forecast for 2030 and 2100. The global crude oil production is about 97% of conventional oil and the remaining 3 percent nonconventional oil (Sorrell, Speirs, Bentley, Miller, & Thompson, 2012). Scholars are arguing that the proportion of the conventional crude oil production in the year 2030 would drop to around 90% creating a gap in world crude oil market (Sorrell et al., 2012). Others believed that an increase in the price of the commodity would not affect global crude oil production as it would make the nonconventional production such as the oil sands attractive (Sorrell et al., 2012).

Many scholars believed there is a decrease in the global crude oil reserve and production of the conventional oil; others argued that the high cost of producing the nonconventional oil makes it difficult as an alternative (Miller & Sorrell, 2014). According to BP (2016), the total world crude oil reserves dropped by 2.4 billion barrels in 2015 to 1697.6 billion barrels. However, the global reserves increased by about 24% (or 320 billion barrels) over the last decade (BP, 2016). Brazil had the largest decline in reserves while the OPEC countries maintained the first position in global proved reserves (BP, 2016). The discovery of vast reserves of the oil sands deposits in Venezuela and Canada impacted the world reserves to production ratio and history. According to BP (2016), the South and Central America region produced the highest reserves to production ratio in 2015. The region also recorded the largest reserves to production ratio

history. The world total crude oil production relies on a few number of large fields of conventional oil reserves located within the Gulf region. Many of these oil fields are relatively old, and are either at their peak of production or would start to experience a decline in production in a couple of decades (Sorrell et al., 2012). The future world crude oil supply depends on the growth of the reserves by discovering of new giant fields that have little chances of success if the focus is on the conventional oil (Miller & Sorrell, 2014; Sorrell et al., 2012).

There is a projection of a gradual decline in the world production of the conventional oil by 2030 with the noticeable signs before the year 2020 (Miller & Sorrell, 2014). In a forecast that aligns closely with that of the National Energy Board (NEB) Canada, Alcocer et al. (2013) expects that the peak oil occurs around 2030. According to Hallock Jr. et al. (2014), the period of global reduction in conventional oil production varies from between the year 2004 and 2053. While there is a debate about whether the peak oil has occurred or not, there has been a noticeable gap between the supply and demand of the conventional crude oil production since 2005 (Murray & David King, 2012). Presently, there is an inelastic demand for the conventional crude oil because the supply of the product remained almost constant between 2005 and 2012, whereas there was an increase in demand during the same period (Mohr, Wang, Ellem, Ward, & Giurco, 2015; Murray & David King, 2012). The volatility of the crude oil market with its attendant increase in the prices of the product seems to signal the end to the supply of low-cost oil (Hallock Jr., Wu, Halla, & Jefferson, 2014; Kumhof & Muir, 2013). The two important causes of the persistent rise in crude oil prices are continued demand of the

product from the emerging markets due to economic growth and the stagnant crude oil production (Kumhof & Muir, 2013). The global crude oil production experienced annual growth of about 1.5 percent between 1995 and 2005 and remained flat after that due to increased supply from the oil sands and tight oil (Miller & Sorrell, 2014).

The estimated global consumption of petroleum and other related products show an increase of more than 20% compared to 2010 figure for the next couple of years (Newell & Iler, 2013). China's oil demand is to experience continuous increase for the next couple of decades due to the country projected economic development (Wang JL et al., 2015). The IEA (2012) projects growth in oil consumption is resulting in an increase in oil demand from 87.4 Mb/d in 2011 to 99.7 Mb/d in 2035. The forecast puts the average crude oil import price at over $215/barrel from the 2011 figure of $125/barrel (IEA, 2012). The world transport system accounts for over 50% of the global oil consumption, and the percentage is likely to rise with a forecast of 1.7 billion passenger cars and an increase in demand for road shipment by 2035 (Finley, 2012; IEA, 2012). While the global crude oil forecast points to a decline in conventional crude oil, there is no evidence to suggest the reduction in the use of petroleum in the transport, defense, energy and chemical industries (Finley, 2012; Hallock Jr. et al., 2014). There is also the question of growing world population and its impact on the consumption of petroleum products, as well as civil and political unrests in crude oil producing countries such as Nigeria, Libya, Sudan, and Syria (Hallock Jr. et al., 2014).

The IEA (2012) expects a fall in the crude oil production from the existing fields from 68.5 Mb/d in 2011 to about 26 Mb/d in 2035. The report expects the global crude oil

production to increase to 96.8 Mb/d over the period due to technology development, the discovery of new oil fields, and nonconventional sources (Miller & Sorrell, 2014). Masoumzadeh, Möst, and Ookouomi Noutchie (2016) projected the total world oil supply and global oil value by the year 2035 at 93.02 Mb/d and US$80.09 per barrel respectively. The IEA (2012) forecasts an increase in the non-OPEC members' crude oil production; however, the supply of the products after 2020 depends on the output of the OPEC members. The nonconventional oil from the United States, Canada, and Brazil will move the supply from under 49 Mb/d in 2011 to above 53 Mb/d after 2015 up to the middle of the 2020s, and then back to 50 Mb/d in the year 2035 (IEA, 2012). The IEA (2012) based its anticipated increase in the world crude oil production on the production contribution from the nonconventional oil, light tight oil, and natural gas liquids. While there are doubts regarding the oil production of many OPEC and non-OPEC members, there are high potentials for countries such as Saudi Arabia, Iraq, the United States, Canada, Brazil, and Venezuela to increase their current production capacities (Newell & Iler, 2013).

The Canadian crude oil production forecast is about 4.6 MMBD by the year 2029; out of which the oil sands production will be around 3.8 MMBD (Alcocer et al., 2013). Canada crude oil production in 2030 will be about 5 MMBD; a figure projected to double the 2008 production of a little over 2.5 MMBD (Alcocer et al., 2013). In the year 2030, the crude oil production from oil sands will amount to about 81% of Canada total output, and this represents a change of about 34% over 2008 figure (Alcocer et al., 2013). Grushevenko and Grushevenko (2012) stated that nonconventional oil has a high

potential for development. The growth in nonconventional oil would be high in North America in the next couple of years, and the long-term production from nonconventional oil would offset the decline in conventional crude oil production (Grushevenko & Grushevenko, 2012; Finley, 2012; Mohr et al., 2015). The projected crude oil production from the nonconventional oil has placed the region on the path of net self-reliance up to between 2033 and 2038 (Newell & Iler, 2013; Mohr et al., 2015). With the crude oil production from the North America countries accounting for about 20% of the world output in 2010, and the expected increased production from the United States and Canada should balance off the reduction in production from Mexico (Newell & Iler, 2013). The growth in the North America petroleum production would be from Canada's oil sands with a projected figure of 5 million barrels per day by 2035 and the USA tight oil (Newell & Iler, 2013; Mohr et al., 2015).

The world economy is not running out of crude oil; however, the production process is getting expensive and challenging due to shifting of attention from the conventional oil to the nonconventional oil (Murray & David King, 2012). With the present situation in the world oil market, it seems the period of low crude oil price is over, and the production of the nonconventional crude is becoming economical (Hosseini & Hamed, 2016). The nature of the nonconventional crude oil requires price dynamics that support profitability, expansion of the production capacity and investment in manufacturing technology (Hosseini & Hamed, 2016). The advent of latest techniques in the extraction of nonconventional crude oil has reduced the cost of production and makes it competitive with conventional oil (Grushevenko & Grushevenko, 2012). The

development of the oil sands project would continue as long as the world oil prices exceed US$35.50 per barrel profitability level (Chindo, 2015). Rajnauth (2012) believed that with the vast oil reserves, improved technologies, and long-term potentials of the nonconventional oil; there should be a pragmatic shift in global crude oil focus from conventional to nonconventional crude oil production.

The nonconventional oil is gradually taking a strategic position in the world energy markets (Grushevenko & Grushevenko, 2012; Matsumoto & Voudouris, 2015). The expected decline in the conventional oil production compared to the rising crude oil demand makes the development of the nonconventional oil production an important and realistic option for the global economy (Wang JL et al., 2015). The forecast is that from the year 2050 to 2060, the crude oil production from Canada and Venezuela will be higher than the production from both Saudi Arabia and Iran (Matsumoto & Voudouris, 2015). The depleting position of the conventional oil will create opportunities for countries such as Canada and Venezuela with nonconventional oil to become global oil policy makers (Matsumoto & Voudouris, 2015). In the year 2100, the impact of conventional oil would reduce as the nonconventional oil from North America will significantly dominate the global crude oil market (Grushevenko & Grushevenko, 2012; Mohr et al., 2015). However, Mohr et al. (2015) believed that the expected growth in nonconventional oil would enable a slower decline but would not be adequate to bridge the gap created by the reduction in conventional oil production. The assertion by Mohr et al. seems correct regarding the inability of the nonconventional oil to fill the decline in production based on available data on reserves. However, with continuing technological

developments, there is a general belief that there would be the discovery of more oil sands crude reserves and the number of known reserves would increase.

Historical Background of the Oil Sands and its Reserves

The extraction of bituminous sands also known as the oil sands comes from a resource that is either dark brown or black (Blair, 1950). There are different theories regarding the origin of the oil sands (Blair, 1950). One school of thought believed that the oil sands originated during the Cretaceous period while the second proponent argued that oil sands resulted during the Devonian period (Blair, 1950). Blair (1950) stated that transformation process that occurs due to the leakage of parts of the components contribute to the present physical condition of the oil sands. The Europeans travelers claimed to have discovered the existence of oil sands in the 18th Century. However, records are showing the historical roles the of the First Nation communities, the Hudson's Bay Company trading post at Fort Churchill, as well as the contributions of Peter Pond and the visit of Sir Alexander MacKenzie in 1790 regarding the oil sands (Atkins & MacFadyen, 2008; RAMP, 2016). The Aboriginal communities had been using the resource in various ways before the period of the 18th century (Atkins & MacFadyen, 2008; University of Alberta, 2013). The First Nation communities had at one time, or the other used the oil sands for canoe sealing, dressing of wounds and clothing water-resistant (Dunbar, Stogran, Chan, & Chan, 2004).

The initial research on the oil sands crude indicated a higher percentage compared to conventional crude oils, as well as a wider presence of the oil sands across the country (Blair, 1950). While not many people doubted that the vast deposits of oil sands in

Northern Alberta would be of economic value to the oil and gas industry; however, the concern was the process of development and the timing (Clark & Blair, 1927). The results of various field study by the private sector and government agencies proved that oil sands crude has the potential of becoming a major oil supply (Blair, 1950; Atkins & MacFadyen, 2008). The early studies indicated the various usefulness of the oil sands such as for the pavement development, road construction, and crude oil production for the manufacture of different petroleum products (Clark & Blair, 1927). The outcome of many types of research regarding the economic importance of the oil sands propelled scientists on establishing a method of separating the components of the oil sands. In 1875, Macoun noted the possibility of using water to separate crude oil from the oil sands while Christian Hoffman luckily performed the first experiment of separating crude oil from the oil sands using water (RAMP, 2016). However, in 1926, Clark developed the "first energy-focused" technique and the perfection of the hot water separation procedure known as the extraction method in the oil sands industry today (University of Alberta, 2013: RAMP, 2016). The various research also produced the basic three-staged technological approach that most companies in the sector still adopt in the production process (Atkins & MacFayden, 2008). The first stage of the extraction process involves the shredding of the rock-like oil sands into particles. Secondly, the addition of hot water to the crushed oil sands. Thirdly, the extraction process that includes the separation of the oil sands from other components.

According to the RAMP (2016), the commercial development of the oil sands started in the late 1960s; while historical records are dating back to 1717 about efforts to

commercialize the oil sands industry. In 1882, Bell recognized the petroleum economic potential in the northern part of Alberta (RAMP, 2016). The Alberta oil sands shot into global focus a couple of decades ago due to the perceived decline in the conventional oil; however, the Aboriginals have known about the resource for centuries (Dunbar, Stogran, Chan, & Chan, 2004; Timilsina et al., 2005). Apart from the discovery and use of the oil sands, the Aboriginal people living in the northern part of Alberta also informed the traders in Hudson's Bay Company in 1719 about the existence of the resource in the area (Dunbar, Stogran, Chan, & Chan, 2004). Fitzsimmons commercialized the oil sands in 1930 following the design of Clark to construct a hot-water separation plant that produced about 300 barrel of oil sands using a seven-man crew (RAMP, 2016). The initial attempts to commercialize the oil sands industry did not record much success as all the ventures died prematurely.

After the withdrawal of the federal government support of the oil sands projects in 1945, the Alberta government took over the management of the oil sands resources with the hope of making the industry commercially viable (Parker & Tingley, 1980). The provincial government-designed policies and regulations aimed at encouraging private investment both from within and outside the country (Parker & Tingley, 1980). In 1948, the Alberta Government took over the hot-water separation plant due to ownership and financial problems, and a year later, the government closed it due to lack of interest in a commercial venture (University of Alberta, 2013: RAMP, 2016). However, in 1950, the Alberta Government announced the viability of the oil sands industry and years later it

came out with an oil sands policy for the development of the sector (University of Alberta, 2013: RAMP, 2016).

The formation of the Great Canadian Oil Sands (GCOS) project that transformed to Sun Oil Company due to ownership change and later Suncor Energy in 1967 signaled the commencement of the first world oil sands operation ((University of Alberta, 2013). Other oil sands companies such as Syncrude and Imperial Oil also joined Suncor Energy in the oil sands sector. The Syncrude group came into existence in 1964, got production facility approval in 1969, and produced its first barrel of crude oil in 1978 (University of Alberta, 2013). In the same vein, the Imperial Oil started production in Cold Lake, in 1985, and contributed to the increase in oil sands crude by 500 percent from 1984 to 1996 (RAMP, 2016).

The early studies of the oil sands agreed about the massive size of the reserves; however, there was no information on the exact figure (Blair, 1950). With the purported significant amount of reserves, many scholars and investors did not pay much attention to the oil sands due to the perceived less economic impact until recently (Atkins & MacFadyen, 2008). The early analysis of the economic potential of the oil sands produced results where unit costs were higher marginally when compared to prices (Atkins & MacFadyen, 2008). The estimate of the Alberta oil sands reserves is about 1.6 trillion barrels of crude oil (Humphries, 2008). Under the present technology, about 11% (175 billion barrels) of the reserves is recoverable (Humphries, 2008).

The Alberta Energy and Utility Board projects the oil sands reserves volume to be around 2.5 trillion barrels, while the expected recoverable is about 314 billion barrels

(Humphries, 2008). However, the Energy Information Administration puts Canada's reserves projection by 2025 at about 1.645 trillion barrels (Humphries, 2008). As indicated in Table 1 below, Canada occupies the third position on the list of countries with significant crude oil reserves. The oil sands reserves in Alberta province are over 170 billion barrels of established recoverable oil (Atkins & MacFadyen, 2008). Alberta Canada (2014) believed that the oil sands reserves published represent what current the technologies in the sector could extract. However, with improved technologies, the projected oil sands reserve is about 1.8 trillion barrels (Alberta Canada, 2014).

Table 1

Top 10 Countries with Proved Oil Reserves

Rank	Country	Oil proved reserves (bbl)
1	Venezuela	297,599,991,808
2	Saudi Arabia	267,899,994,112
3	Canada	173,100,007,424
4	Iran	154,599,997,440
5	Iraq	141,399,998,464
6	Kuwait	103,999,995,904
7	United Arab Emirates	97,800,003,584
8	Russia	80,000,000,000
9	Libya	48,009,998,336
10	Nigeria	37,199,998,976

Note: From "Country Comparison-Crude Oil-Proved Reserves," Central Intelligence, *CIA World Factbook-January 1, 2014*

Foreign Direct Investment and Oil Sands Development

The oil sands industry has witnessed investment from many domestic and foreign companies, with a combined capital of over $200 billion (Mech, 2012). Investment in the oil sands sector over the last decade constitutes the largest capital project in Canada's history (Burt et al., 2012). The oil sands industry has attracted investors from countries

such as the United States, China, Japan, Norway, France, South Korea, Netherlands, and India (Mech, 2012). However, for the industry to meet the expectations of the stakeholders, it needs to access more funds from investors outside Canada (Dobson, 2014). According to the Canadian Energy Research Institute (CERI), the oil sands sector requires about $100 billion in capital investment by the year 2019 to attain full development (Beaulieu & Saunders, 2014; Dobson, 2014). The Energy Resources Conservation Board (ERCB) expects the focus of the investment to be in areas such as the surface mining, upgrading, in situ, and support services. The forecast for the price-adjusted investment to help the oil sands development between the years 2012 and 2035 is put at $364 billion (Burt et al., 2012).

The projected billions of dollars in investment by analysts in the industry is going to impact positively on the production of oil sands crude. There is also the view that the oil sands sector will account for the forecasted increase in the Canadian crude oil production between 2017 and 2037 (Burt et al., 2012). Apart from the increase in crude oil production, the projected domestic spillover effects on employment due to foreign direct investment in the oil sands industry within the period is about 1.45 million people (Burt et al., 2012). The estimated wages and salaries resulting from the direct and indirect employment of the development of the oil sand sector is about $172 billion (Burt et al., 2012).

The development of the oil sands in Alberta province is a gateway to the socio-economic growth of the Regional Municipality of Wood Buffalo. The city of Fort McMurray enjoys the cultural diversity that makes it the home of many immigrants and

Canadians. The more capital projects introduced in the area through foreign direct investment, the more people will likely move to the region. The movement of individuals to the oil sands region will help to develop the real estate industry and encourages more small and medium-scale enterprises to have offices in Fort McMurray. In the same vein, it will contribute to increasing the amenities government provides to the community, increase government revenue and which will also lead to an increase in the standard of living of the people. The Regional Municipality of Wood Buffalo is proactive as it already has a 20 years' Municipal Development Plan to address the issues of growth in population, infrastructure demand, and housing constraints. According to Burt et al. (2012), the development of the oil sands industry will also impact significantly on the economic policy of the government at the federal and provincial levels. The projected inflation-adjusted government's revenues for the period between 2012 and 2035 is $79.4 billion (Burt et al., 2012).

The development of the oil sands industry will also impact the country's foreign trade, with the United States becoming the primary beneficiary (Burt et al., 2012). The country's policymakers will have to be abreast with issues related to foreign direct investment and oil sands development. Some of the concerns include the provision of adequate infrastructure, workforce training and development, and sustainable development (Burt et al., 2012).

Oil Sands Development and Environmental Issues

The massive global economic growth witnessed since the early 1980s saw the use of more energy and other related natural resources with their attendant waste products

that created environmental concerns (Hossain, 2012). The development of the oil sands brings with it costs that impact on the society and environment negatively (Giesy et al., 2010; Giacchetta et al., 2015). There are cases of illnesses of people living in the surrounding communities, pollution of fresh water, and death of wildlife and fish associated with the oil sands production (Chindo, 2015). The crude oil produced from the oil sands sector generates a higher greenhouse gas (GHG) emissions compared to the conventional crude (Giacchetta et al., 2015). The increase in GHGs emissions led to an outcry from many environmentalists on global warming and climate change (Hossain, 2012). The environmentalists consider the oil sands production as dangerous to both human and non-human beings. The oil sands industry is facing regulatory obstacles on the main projects due to environmental concerns that put the safety of people, animals, birds, and plants into danger (Anis & Siddiqui, 2015).

Presently, the oil sands industry contributes about 5% to total Canada's GHG emissions and less than 0.15% of the world's GHG emissions, but the figure could increase if there are no control measures in place (Giacchetta et al., 2015; Poveda, 2015). It is important for the operators in the sector to provide mitigating factors to reduce the health and welfare concerns (Giesy et al., 2010). The operators of the oil sands sector should embark on strategies that encourage sustainable development (Anis & Siddiqui, 2015). Cowan, Chang, Inglesi-Lotz, and Gupta (2014) suggested holistic energy policies to achieving economic growth and the implementation of conserving energy. Many industrialized nations have in place a couple of initiatives to decrease and control atmospheric concentration of GHG emissions (Ozcan, 2013). In the whole of North

America, the Alberta province is the first to introduce mandatory reduction regulation for greenhouse gasses (Poveda, 2015). The law requires industrial facilities producing over 100,000 tons of greenhouse gasses in a year to reduce it by 12% or pay the penalty (Poveda, 2015). Though the industry average is still below the acceptable standard, the oil companies operating in the sector have reduced the GHG emissions level from the 1990 figure of an average of about 39% (Poveda, 2015). With continuous investment in research and advancement in technology deployed in extracting the oil sands, the industry is moving towards achieving the global standard for the greenhouse gas emissions level.

The government of Canada is also committed to further reduce the GHG emissions by 17% below 2005 levels by 2020 in line with the Copenhagen Accord (Government of Canada, 2013). The agreement of United Nations' Kyoto December 11, 1997, is targeting at reducing the GHGs among the 37 industrialized nations, as well as the European countries (Ozcan, 2013). The UN and other organizations have policies to address the adverse effects of global warming. While compliance to the reduction of GHGs emissions to 5.2% is not yet a mission accomplished, some countries like Japan and Canada have made an exceptional commitment to achieving this target (Hamit-Haggar, 2012; Hossain, 2012). The Canadian government has in place a policy to reduce GHGs emissions by 6% yearly between 2007 and 2010 (Hamit-Haggar, 2012). The recent studies showed that there is a decline in carbon emissions resulting from energy consumption due to government policies (Hamit-Haggar, 2012; Hossain, 2012).

Filling the Research Gap

The energy sector of the Canadian economy has in the past received attention from scholars, business community and government about the need for adequate funding. The country's policy makers encouraged foreign funds to enhance the growth of the energy industry. Paskey et al. (2013) believed that the oil sands sub-sector of the energy sector requires foreign direct investment for it to operate at optimal level. In the same vein, Burt et al. (2012) reasoned that the oil sands need foreign capital to sustain the standard of growth required, as well as for the development of new projects. While many studies mentioned the necessity of foreign direct investment for the growth of the oil sands industry, there was no particular focus on the economic aspect of the sector apart from Giaccheta et al. (2015) research that showed the profitability of investment in the oil sands industry. In line with Giaccheta et al.'s wish for further studies on the economic justification of investment in the industry, I focused on the impact of foreign direct investment in the development of the oil sands sector.

Summary and Conclusions

The review of literature in this chapter revealed the importance of foreign direct investment in the global economy. Although there were initial objections to the concept by the policymakers of some countries due to lack of proper understanding and perceived fear of recolonization; government officials now craft policies to attract foreign direct investment to their countries. In the academic world, there are divergent views on the impacts of foreign direct investment in the host country. One school of thought believes the concept impacts positively on the economy of the host country while the other thinks

otherwise. However, the general understanding among scholars is that there is a connection between foreign direct investment and the economic growth of the receiving countries (Alfaro & Charlton, 2013; Imoudu, 2012).

The oil and gas industry is a major supplier of energy to the world. The relevance of the crude oil in providing petroleum products needed to sustain the global economy makes the oil and gas sector crucial to every segment of the world market. While there is a projection of higher demand for crude oil due to a continuous increase in consumption, there are concerns about the supply side of the product. The fear is what many scholars viewed as the global reduction in crude oil reserves and the production of conventional oil. However, the forecast for the nonconventional oil production shows opposite of the conventional oil. The Alberta province oil sands is the largest untapped crude oil reserves in the world that with enhanced technologies can provide about 1.8 trillion barrels (Alberta Canada, 2014).

Although, the concept of foreign direct investment is not alien to the oil sands as investors from many countries have a presence in the sector; however, the industry needs more funding that is outside the capability of the local investors to meet the expectations of the various stakeholders (Dobson, 2014). To fully develop the oil sands, the Canadian Energy Research Institute believed the sector requires about $100 billion in capital investment by the year 2019 (Beaulieu & Saunders, 2014; Dobson, 2014). The development of oil sands in Alberta province brings environmental concerns. However, the various companies operating in the industry and government of Canada are committed to ensuring the production of oil sands crude is in line with the Copenhagen

Accord (Giesy et al., 2010; Government of Canada, 2013; Giacchetta et al., 2015). The next chapter is a presentation of the research methodology with a focus on foreign direct investment and its effects on the oil sands industry in Canada.

Chapter 3: Research Method

Various researchers (Beaulieu & Saunders, 2014; Guilbeault et al., 2013; Paskey et al., 2013; Timilsina et al., 2005), as well as government and private reports, have shown the enormous potential of the oil sands sector to the Canadian and global economies. The purpose of this study was to describe the effects of foreign direct investment in the oil sands industry development in Canada. The research method of the study was the qualitative approach, while the research design was the case study method, as it involved exploring an occurrence. Chapter 3 is a detailed explanation of the study design and rationale, population target, sampling strategy and procedures, data collection method, data analysis plan, threats to validity, and ethical issues.

Research Design and Rationale

The research design for this qualitative study was the case study method. According to d'Avolio, Bandinelli, Pero, and Rinaldi (2015), the case study is a research plan that focuses on gaining a better understanding of a phenomenon using an entity as a model. The use of case study is most appropriate in the qualitative research approach where the event represents the real-life situation, as well as when there are no clearly defined boundaries (Scavarda, Ceryno, Pires, & Klingebiel, 2015). Researchers use the qualitative research method to analyze the situation under observation in greater depth (Galuk, Zen, Bittencourt, Mattos, & De Menezes, 2016).

In research, the qualitative case study produces theoretical insight into situations using case-specific scenarios (Hoon, 2013). Other scholars view the case study research as a strategy that involves the study of modern organizational phenomena in a real-life

situation with a thorough understanding of selected cases (Guerra, Gomes, & Filho, 2015). Scholars use the evidence generated from case studies to produce the theory that researchers utilize for the same phenomenon in a similar environment (Hoon, 2013). Tavallaei and Abu-Talib (2010) believed that the distinctive nature of the case study requires the identification of the theoretical or conceptual viewpoint at the commencement of the research. The theoretical or conceptual perspective guides the research questions and study analysis, as well as the interpretation of the result (Tavallaei & Abu-Talib, 2010).

The case study technique of the qualitative method helps researchers to analyze an event or a scenario to draw out relevant features necessary to form a general opinion or theory (Ndimande, Chisoro, & Karodia, 2016). A researcher's background, knowledge, experience, and the study preparation process are critical in qualitative research (Voinea, Staiculescu, & Schileru, 2016). Brook et al. (2015), referencing Timmons and Cairns (2009), stated that a case study enhances the researchers' knowledge and understanding, and it allows for flexibility in the course of the research. It is important for researchers to adopt the right intuition at any given time, understand when and how to use information, and adopt the right sampling strategy in selecting the participants (Voinea et al., 2016).

I used an exploratory case study method due to the scarcity of literature on foreign direct investment and oil sands industry development. I considered the case study appropriate because my research involved understanding a phenomenon: the relationship between foreign direct investment and the oil sands development in Canada. I chose a single case approach because of the limited number of companies in the industry with

relevant experience. I used the case study technique to examine the pre and post effects of direct foreign investment in the company under study.

The use of a company with foreign investors for the case study enabled an understanding of the impact of foreign direct investment in oil sands industry, as well as helped in the research's analysis using a conceptual model (de Barros, Omar José Evangelista, & Wanderley, 2016). The use of qualitative case-based research helped to answer the research questions (Nunes, 2016). Also, case study method is useful in analyzing the effects of regulations on industries or institutions such as the oil sands sector (Davidaviciene & Vengriene, 2015). The qualitative case research approach was also relevant to my study because it is exploratory and involves getting a deeper knowledge of an emerging occurrence or practical issue (Nunes, 2016). The development of oil sands is an emerging event that requires better understanding.

Methodology

I used a single case study to describe the effects of foreign direct investment in the development of the oil sands industry in Canada. The selection of a particular firm as a model for the case study usually depends on the availability of relevant data that a researcher could turn into useful information for the research (Takeno, Lucato, Vanalle, & Vieira, 2015). A case study encourages the use of various methods of collecting data in a phenomenon (Brook et al., 2015).

According to Candrea and Hertanu (2015), an important feature of the case study is the determination of the relevance of information gathered from the secondary data source especially from the company under study. The secondary data collected using the

archival research strategy enabled a better analysis of the facts of the case, as well as a deeper understanding of the effects of foreign direct investment on oil sands industry development in Canada (Guimarães, Cançado, & Lima, 2016). According to Ndimande, Chisoro, and Karodia (2016), the use of an archival research strategy as one of the primary data collection methods enable the review the company's record and extracting evidence.

The use of case studies has associated benefits; however, the disadvantages include the difficulty of conducting case study interviews, the inability to generalize results, and the potential to compromise validity due to lack of rigorous control (Rixon, Rois, & Faseruk, 2015). To ensure the quality of the study, qualitative researchers should not contend with only one type of proof but must provide different types of data collection to support their feelings (Abu Bakar & Ishak, 2012). The use of multiple sources of evidence reduces concerns such as bias, the reliability of data, validity, and the credibility of the result (Guerra et al., 2015; Yin, 2002).

I used the interview method to collect primary data. The source of collection of primary data was by conducting multiple interviews. Similar to Martínez-Costa et al. (2015), I supported the primary data with secondary data from a review of documents related to the case study company, such as articles, reports, company documents, and the information available on the company's website. According to Mohinder and Sanjeev (2016), another source of secondary data is the company's annual report. I extracted production data from the case study company's financial statements for the research.

The purpose of conducting interviews to collect data was to understand the phenomena of the research in the firm (de Moura, Comini, & Teodósio, 2015); and to use the data to analyze the impact of foreign direct investment in the development of the oil sands industry in Canada. I adopted interview guidelines to enhance the collection of detailed information during the data gathering stage, as suggested by Guimarães et al. (2016). The use of interviews for data collection produced a better result. Interviews create an opportunity for probing the interviewees for additional information, giving room for maneuvering in the crafting and asking questions, and providing chances for clarifications during the interview process (Rixon, Rois, & Faseruk, 2015). I adopted semistructured interviews because this method allows for the use of questions that elicit discussions to explore themes or further responses (Galuk et al., 2016; Saxena, Sharma, Rachuri, & Joshi, 2015). The semistructured interview approach involves asking open-ended questions that allow for flexibility and ensure the quality of the data collected (Awasthy & Sahai, 2015).

Though the interview process enhanced this qualitative study, there are challenges associated with conducting a qualitative interview. Frankfort-Nachmias and Nachmias (2008) believed the biggest obstacle to a successful interview is the capacity to get the cooperation of the respondents. To receive support, I showed genuine interest in the respondents, proved that the study was worthwhile, and overcame the barriers to interview through explanation in a friendly manner, as described by Frankfort-Nachmias and Nachmias (2008).

Population

The target population is relevant to the study because the participants are to answer the research questions. The credibility of a study's results is usually a function of the level of cooperation and integrity displayed by the research participants (Ndimande, Chisoro, & Karodia, 2016). I adopted a case study sampling strategy that selected an organization as the population. The target number of participants for interviews for the study was 15 people, including employees of the chosen company, oil sands industry professionals, scholars, and government employees. I interviewed three former or present employees of the case study company, seven professionals from the oil sands sector, and five academics and government employees directly involved in the industry.

Sampling and Sampling Procedures

The theoretical and practical views influenced the choice of the sample size (Robinson, 2014). In practice, researchers at the design stage of their studies adopt provisional sample size to allocate resources and for planning (Robinson, 2014). Robinson (2014) advised researchers to take sample range size approach with lower and upper limits, than the fixed number. Robinson categorized the sample strategies available to case study researchers as the random/convenience and purposive sampling strategy. Apart from the knowledge and experience, the purposeful sampling involves the individuals having qualities such as availability and readiness to participate, ability to fluently communicate experiences and opinions (Palinkas et al., 2015). I used the purposive sampling strategy for the study because the oil sands industry is unique and the research required individuals with knowledge of the sector as participants.

Data Collection

An exceptional aspect of the case study is the ability to use several sources in the collection of data. The method also allows a researcher to choose the type of evidence to collect in advance, as well as the data analysis techniques to use to answer the research questions (Yin, 2009). Yin (2009) identified six ways to collect data in case study method. The six ways are through documentation, archival records, interviews, direct observation, participant-observation, and physical artifacts. The sources of data collection were through the use of interviews and documentary analysis in line with the suggestion of de Barros et al. (2016).

The shortcomings of a source of data collection technique informed the decision to adopt data triangulation method (Chinomona & Sibanda, 2013). The concept of data triangulation involves the use of multiple sources such as observations, interviews, and documents to collect data (Yin, 2009). The data collection method included the review of the records of the selected company through the website, as well as examine the various reports on the oil sands from the government, agencies, and individuals (Cardoso, Filho, & Vieira, 2016). The scheduling of interviews for the study was through the use of e-mail. The study's interview process involved methods such as the face-to-face and telephone.

I used the interview method because the process gave room for the convenience, flexibility, and availability of the participants, as well as provided access to different groups of respondents (de Barros et al., 2016; Frankfort-Nachmias & Nachmias, 2008). The interview process had personalized touch, created room for clarification of questions

and produced in-depth results (Frankfort-Nachmias & Nachmias, 2008). The process of interviewing as a data collection method also offered the participants the opportunity to express themselves. The interview process followed the interview protocol to enhance clarification, verification, and refining of the key issues (Chinomona & Sibanda, 2013). I designed the interview protocol (Appendix A) to guide the data collection method and to ensure that there was consistency in the responses of participants (Yin, 2009). During the meetings, I took short notes for likely coding and themes. There are weaknesses associated with the interviewing process such as limited sample space, costly, unreliable information from respondents and bias (Frankfort-Nachmias & Nachmias, 2008). However, with proper planning, as well as the use of standardized interview questions, interviewer bias can be circumvented

There are associated ethical issues connected with the utilization of the interview technique as a data collection method. A researcher needs to explain the purpose of the meeting to all the participants, exhibit truthful and honesty regarding the purpose of the research, as well as the associated risks and rewards. A researcher should also make sure there is the confidentiality of the information collected from the participants, ensure openness in the conduct of the research, and ensure that participation is voluntary.

Many organizations face challenges regarding the release of records due to the importance of such information. An important way to collect sensitive information is by seeking for approval from the management of the company under study. I was willing to sign a confidentiality agreement to assuage the management of the firm that I would use the information for research purpose only. The process of seeking approval for the

organization's records ensures the researcher gathers the right information with minimal effort and cost. However, I used the anonymous case study company because of the challenges of getting permission from the management of the company.

Data Analysis Plan

There are instances where the use of multiple sources for collection of evidence sometimes leads to the duplicate of records during data entry (Chu, Ilyas, & Papotti, 2013). The errors resulting from data entry can impact the reliability and credibility of the information produced. It is necessary for researchers to engage in data cleaning; which is the process of detection and correction of errors in data (Chu et al., 2013). Many scholars believed that to solve the problem of data producing errors it is necessary to adopt the application of rules or checks on the target database. Though, the process could lead to detection and repair of mistaken data but might not identify and analyze the sources of the errors to prevent future occurrence (Chalamalla, Ilyas, Ouzzani, & Papotti, 2014). A better approach is the use of the descriptive and prescriptive data cleaning that describes the errors and suggests ways of resolving the errors (Chalamalla et al., 2014). Chu and Ilyas (2016) recommended the use of both full automation and humans' techniques for detecting errors and identification of duplicate records in qualitative research.

Despite the enormous expectations from researchers regarding receiving thoughtful answers from participants in questionnaires, the results do not always align with this belief (DeSimone, Harms, & DeSimone, 2015). The inability to guarantee errors free responses from participants requires that researchers put in place strategies to discover respondents that did not provide honest answers (DeSimone et al., 2015). The

data screening techniques to identify the untruthful responses are the direct, archival, and statistical. The direct data detection method involves the researchers slotting in additional materials into the research questions to monitor behavioral pattern of the respondents (DeSimone et al., 2015). While the archival screening technique does not modify the questionnaires but focuses on the behavioral patterns of the participants, the statistical testing method uses statistical techniques to identify an abnormal pattern in participants' responses (DeSimone et al., 2015). Another way to address the problem of misleading information emanating from the respondents is to scrutinize the answers provided for reliability and creditability (Aust, Diedenhofen, Ullrich, & Musch, 2013). In the study, I adopted the direct data screening approach to checking the participants' responses, as well as to guarantee that I received quality answers to questions.

The analysis of the data collected was to determine the contribution of foreign direct investments to the development of oil sands industry, as well as the economic impact of the oil sands to the growth of the Canadian economy. The collation and analysis require expertise from the researchers as the qualitative data can become overpowering to the researchers particularly when the study is complex and unstructured (Abu Bakar & Ishak, 2012). In the same vein, Yin (2009) stated that data generated from multiple sources could pose a burden for the researcher due to the size. It is necessary for the researcher to plan on how to document significant data. According to Abu Bakar and Ishak (2012), the use of software helps to improve the study process by the methodical management of the vast amount of data and make it more manageable for interpretation.

The use of software such as NVivo will reduce errors associated with manual analysis and interpretation of data.

Hyett, Kenny, and Dickson-Swift (2014) categorized the checklist for assessing the quality of a case study report into "relevant for all qualitative research" and "high relevance to qualitative case study research." According to Hyett et al., the second group is more relevant for the methodology of the case study. I assessed the quality of the research in line with Stake's (1995) critique checklist. The areas of focus included the flow and sequence of the research, the quality and sufficiency of data used and presented, and the relevance of the study to the body of knowledge.

The focus of this section is to analyze data collected based on the research questions.

1. What are the effects of foreign direct investment on the oil sands industry development?
2. How can foreign direct investment increase the crude oil production capacity of a company?
3. How can foreign direct investment resolve the challenges of skill acquisition and technological transfer of the oil sands sector?
4. How can foreign direct investment in the oil sands industry increase the royalties and corporate taxes due to the government of Alberta?
5. How can foreign direct investment in the oil sands increase employment or job creation?

6. How can foreign direct investment in the oil sands industry improve the quality of workers, as well as translate into increased wages?

Threats to Validity

Validity is a process where researchers measure the accuracy of a concept (Heale & Twycross, 2015). Validity threats create questions about the accuracy of results in research. Heale and Twycross (2015) stressed the importance of the measurement of validity and reliability in ensuring the quality of the study. There are two types of threats to validity, which impact the accuracy of results. The threats are internal and external. The study validity threats center on using the sample data of a company in the oil sands industry. The focus on one company in the oil sands industry and the sample selection create threats to validity. To mitigate the threats to validity in the study, I adopted strategies such as data triangulation, participants' feedback, regression, and statistical analysis.

External Validity

External validity threats denote a situation where a researcher draws wrong extrapolations from the sample data. One of the problems of the external validity threats is the generalization of the results beyond the group in the experiment (Pearl & Bareinboim, 2014). In the same vein, external validity reflects the general applicability of results beyond the cases under observation (Yin, 2009). Yin (2009) suggested techniques such as cross-case examination, within-case analysis and literature review as ways to reduce the threats to external validity.

Internal Validity

Internal validity involves the collaboration of situations with other settings and consists of using evidence from multiple sources in a study (Yin, 2009). A researcher can increase internal validity by the adoption of the principle of component analysis and rotation, the validity of the scale, and internal consistency analysis (Frankfort-Nachmias & Nachmias, 2008).

Construct Validity

Construct validity entails assessing the correspondence between the variables used in an experiment and the results (Cook & Campbell, 1979). Construct validity enhances the quality of the instrument used in measuring findings in research (Frankfort-Nachmias & Nachmias, 2008). A construct is a conceptual term that describes the measurement of an occurrence observed by a researcher (Hamann, Schiemann, Bellora, & Guenther, 2013). Constructs are an important part of the study because they join theory and operations in research (Frankfort-Nachmias & Nachmias, 2008). Researchers require the use of the right measure for the concept under observation to achieve construct validity (Yin, 2009). Threats to construct validity include lack of clarification of constructs, methodology biases, and generalization problem (Cook & Campbell, 1979).

Ethical Procedures

I implemented the three principles identified in the Belmont Report as the fundamental principles that guide the conduct of the research. The three principles consisting of the respect for persons, beneficence, and justice. I also adhered to the

ethical standards of the American Psychological Association (APA) and Walden University's Institutional Review Board (IRB) ethical guidelines.

I treated the participants as autonomous agents. I also ensured the confidentiality of the information collected from the participants, ensured openness in the conduct of the research, and ensured that participation was voluntary. The selection of the participants for the study was through the random selection approach to making sure that there was no bias.

Summary

In this chapter, I addressed areas such as the research and rationale of the study, methodology, target population, sampling, and sampling procedures. It also involved the discussion of the data collection method, data analysis plan, threats to validity, and ethical process in conducting the research. In Chapter 4, I will analyze the data collected and present the findings of the study.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to describe the effects of foreign direct investment on the oil sands industry development in Canada by using a company as a case study. The people interviewed in this study included employees from the case study company, oil sands industry professionals, and scholars in academic and government agencies. I based the selection of the participants on their experience working directly or indirectly in the oil sands industry. The design of the research questions was to enhance the description of the relationship between foreign direct investment and the oil sands development.

In this chapter, I present the study's research setting, participant demographic characteristics, data collection, data analysis, descriptive analysis of results, evidence of trustworthiness, and the summary of results. I used the percentage analysis approach to examine the research questions and bar charts for the presentation of the findings. I also analyzed documents downloaded from the case study company website and the in-situ performance presentations from the Alberta Energy Regulator website for 7 years (2011-2017) trend in the crude oil production figures.

During the study, I examined and analyzed the following research questions using the interview method to collect the data.

1. What are the effects of foreign direct investment on the oil sands industry development?

2. How can foreign direct investment increase the crude oil production capacity of a company?
3. How can foreign direct investment resolve the challenges of skill acquisition and technological transfer of the oil sands sector?
4. How can foreign direct investment in the oil sands industry increase the royalties and corporate taxes due to the government of Alberta?
5. How can foreign direct investment in the oil sands increase employment or job creation?
6. How can foreign direct investment in the oil sands industry improve the quality of workers, as well as translate into increased wages?

Setting

The selected participants for the study were professionals who were either working or had worked in the oil sands industry and scholars in academic or government agencies involved with the oil sands operations. I obtained the informed consent of the participants before the scheduling of interviews. I sent the schedule for the interviews with samples of the questions in advance, included with the consent form, to give time for adequate preparation. I conducted the interviews by telephone and in person. However, before commencing the interviews, I informed the interviewees that their participation was voluntary and that they could withdraw at any point during the interview if they felt uninterested. I explained the reason for the interview and the purpose of the research to all the participants. I assured the participants of the confidentiality of the interview to earn their trust and be able to extract good data.

Also, I told the participants that I would audio record the interview process and took notes for accuracy and quality purposes. I promised to send my notes to the participants a couple of days after the interview for review. The average duration of the interview session was 45 minutes.

Participants Demographics

This section of the study consists of the descriptive statistics of the participants. I selected the participants for the interview through my contact in the oil sands industry, colleges, and universities, and referrals from friends working in government agencies in Alberta. I contacted over 50 people by telephone and through email requesting their participation in the interview. However, many declined citing their incompetence as the main reason for not participating. I present the demographic characteristics of the 15 interview participants in Table 2. Professionals from the oil sands sector accounted for 47% (n = 7) of the respondents, 33% (n = 5) of participants were from government agencies/academic institutions, and employees from the case study company represented 20% (n = 3). There were 13 male participants (87%) and two female participants (13%). As for educational attainment, 33% (n = 5) had a bachelor degree and 33% (n = 5) held a master's degree, 27% (n = 4) had a doctoral degree, and one participant (7%) had an associate degree.

Table 2

Participants' Demographic Characteristics

Variable	Frequency	Percentage
Participant Group:		
Case study company employees	3	20
Industry Professionals	7	46.67
Government/Academic	5	33.33
Gender:		
Male	13	86.67
Female	2	13.33
Education:		
Associate	1	6.67
Bachelor	5	33.33
Master	5	33.33
PhD	4	26.67

Note. *N = 15*. N was the sample population for the study

Data Collection

The timeframe for data collection was 4 months and 2 weeks (i.e., from July 26 to December 9, 2017). There were 15 participants involved in the data collection process. To collect data for the study, I interviewed 13 participants over the telephone and one in person, and I received one participant's written responses to the questions. The interview approach involved the use of audio recording and taking of notes to collect data for the study. The participants resided in the cities of Fort McMurray, Edmonton, and Calgary, in Alberta province. The initial plan presented in Chapter 3 was to interview five former or present employees of the case study company, five professionals from the oil sands sector, and five academics directly involved in the industry. The change was due to the unwillingness of most of the case study company employees approached to participate in

the study. I also changed the case study company to anonymous because of the time constraint the bureaucracy involved in getting approval.

Due to the human subjects involved in the study, I obtained approval from the IRB of Walden University on July 26, 2017, before commencing data collection. The Walden University approval number for this study is 07-26-17-0470090.

Anonymous Case Study Company

The anonymous case study company operates in the city of Fort McMurray, in Alberta province. The company is one of the few companies that experienced a foreign direct investment in the oil sands industry. The management of the case study company introduced technological advancement to its operations for efficiency immediately after the takeover. The company is a member of Canada's Oil Sands Innovation Alliance, which is responsible for providing a platform for fast-tracking the speed of improvement in environmental performance of companies operating in the oil sands sector. The company has increased its commitment to the people and communities around its operating area in the city of Fort McMurray, in Alberta province. The company funds educational programs that train the local workforce, awards scholarships for the aboriginals and engages in research and development. The company seems to have achieved some progress in addressing the issue of environmental concern as the website shows a reduction of about 63% in its carbon dioxide equivalent Emissions and about 27% reduction in emissions per cubic metre between 2013 and 2016. The company also increased its production capacity by 20% in 2015 over the 2012 production capacity.

The present and former employees' reviews about the company on the Internet show that it has a good salary structure, as well as a medical, dental and health spending package, pension benefits, and vacation benefits. However, there was a cultural change after the takeover that negatively impacted employee morale. The focus shifted to profitability with its associated problem of the layoff of some of the workforce.

Data Analysis

The first step in the data analysis was the organization of the data and the audio files transcription as word documents. Then I assigned the unique participants numbers for identification in an excel spreadsheet file pass worded. I read the audio transcripts to look for words or terms used by the participants as responses to the questions asked during the interview. During the interview sessions, some themes emerged from the responses of the participants to the questions. The adoption of semi-structured interviews allowed the use of questions that elicited discussions to explore themes or further responses (Galuk et al., 2016; Saxena, Sharma, Rachuri & Joshi, 2015). The development of themes was one of the objectives of the study's data collection method (Johnson, Dunlap & Benoit, 2010). Also, the qualitative study helps to draw a relationship between themes to understand the occurrence under study (Johnson et al., 2010). Bendassolli (2013) opined that researchers corroborate knowledge through logic and experience and that there was a connection between theory and the data collected during the research. I used the themes that emerged from my interviews with the participants to form frequency that tests the research questions (Bendassolli, 2013). I believe that this approach enhanced the quality of data analysis, as well as the credibility of the study results.

In responding to the central question, the following themes emerged from the responses of the participants. Many of the respondents believed that foreign direct investment would enhance oil sands industry development through; (a) investment in new projects (b) expansion of existing production capacity (c) creation of more job opportunities (d) provision of better infrastructural facilities and (e) improvement in technology. The following themes emerged from participants while responding to the study's sub-questions. The themes are an improvement on the present production technology, increase in research and development, open new markets, training and development, a collaboration of oil sands sector with postsecondary institutions and acquisition of modern technology. Other themes that emerged are the provision of better infrastructural facilities, expansion of government operational bases, competition for workforce and growth in the gross domestic product.

Study Results

Research Question 1

The responses from the telephone and face- to -face discussions revealed that foreign direct investment in the oil sands industry would affect the number of new projects, expansion of the existing production capacity, enhancement of new job opportunities, provision of better infrastructural facilities and an improvement in the technology used in the bitumen extraction process. In Figure 1, 73% of those interviewed believed that foreign direct investment in the oil sands sector would enhance the starting of new projects while about 27% of the respondents did not consider investment in new projects as a way to developing the sector through the effect of foreign direct investment.

On the expansion of existing production capacity due to the inflow of investment in the oil sands sector, about 93% agreed that there is a relationship between foreign direct investment and production capacity expansion, 7% of those interviewed did not raise it in the discussion. In the same vein, about 87% of the people interviewed believed that foreign direct investment in the oil sands sector would enhance the provision of better infrastructural facilities in the oil sites and the communities near bitumen extraction. However, about 13% of the respondents disagreed that the provision of better infrastructural facilities would have a connection with an inflow of investment in the oil sands industry. Also in Figure 1, all the people interviewed believed foreign direct investment in the oil sands sector would boost job creation and improve the technology used in bitumen extraction.

Figure 1. The Effect of Foreign Direct Investment in Oil Sands Industry Development

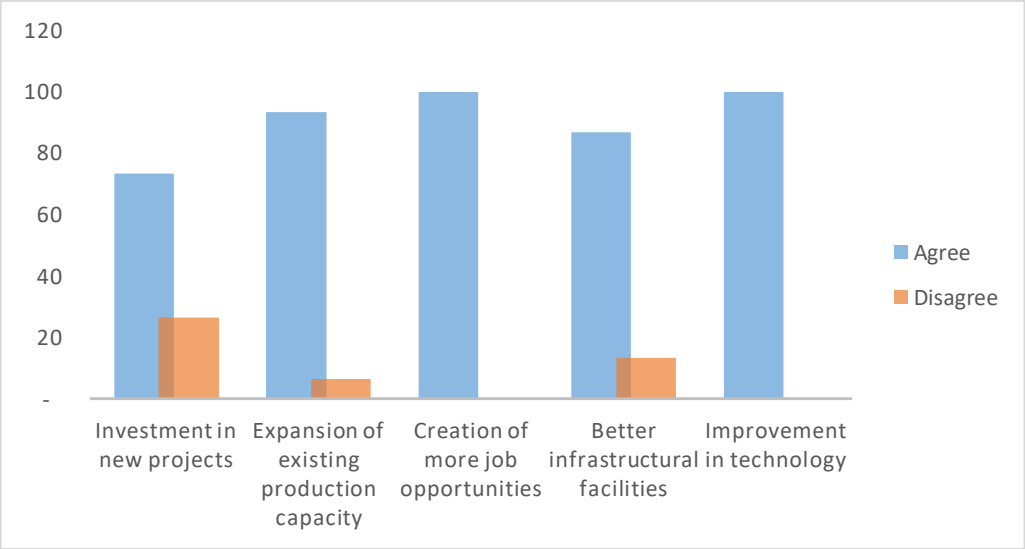

Figure X. Responses to the interview question on the effect of foreign direct investment in oil sands industry development.

Research Question 2

The research question 2 addressed how foreign direct investment could increase the crude oil production of a company. The participants believed that starting of new projects, expanding the existing production capacity, the use of modern or improved technology, research and development, and the opening of new markets as some of the ways an organization with foreign direct investment could increase crude oil production. In Figure 4, most of the participants (93%) mentioned investment in new projects as a way to increase production capacity while about 7% thought otherwise. About 87% of the respondents identified expansion of the existing production capacity as a method to

increase company's crude production, but 13% did not consider it in their responses. The finding is congruent with the case study company that increased its production capacity by 20% in 2015 after the inflow of capital from foreign investors. In Figure 2, about 93% of those interviewed considered improved technology as key to an increase in production capacity while 7% failed to mention it in their responses to the question. About 80% of participants believed research and development would play a role in the crude oil production capacity increase, but 20% of those interviewed did not consider it in their responses. Also in Figure 2, about 60% of the respondents disagreed that the opening of new markets could contribute to an increase in the crude oil production capacity of a company.

Figure 2. How Foreign Direct Investment can Increase the Oil Sands Production Capacity

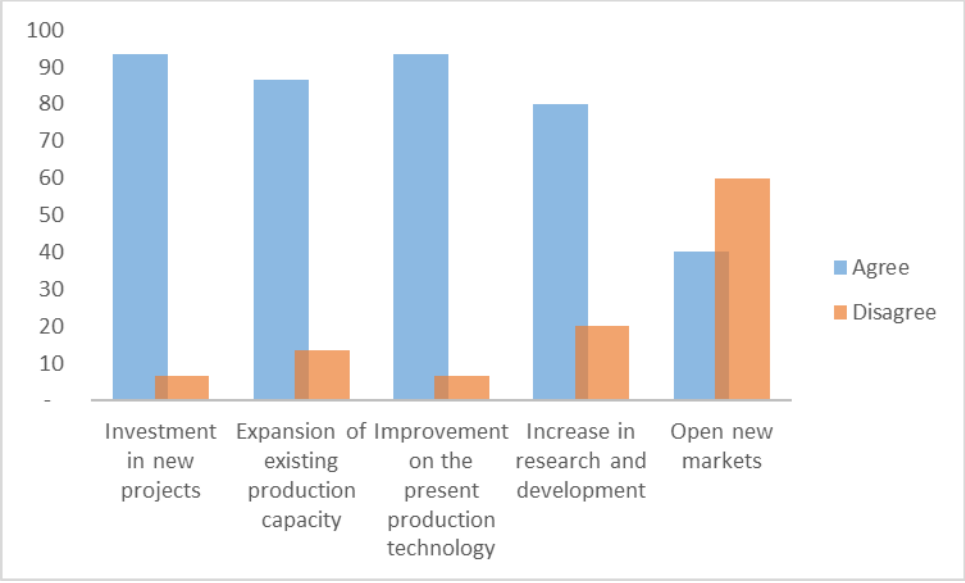

Figure X. Responses to the interview question on how foreign direct investment can increase the crude oil production capacity of a company.

Research Question 3

The participants identified training and development, collaboration with higher institutions, acquisition of modern technology, and research and development as a solution to the question. Figure 3 revealed that 93% of the participants acknowledged training and development as important in resolving the challenge of skill acquisition while 7% of those interviewed did not consider it in their responses. Also in Figure 3, 80% of the participants recognized the collaboration of companies operating in the oil sands industry with the postsecondary institutions, as well as the acquisition of modern technology as a solution to solving the problems of shortage of workforce and technological transfer while 20% of those interviewed failed to identify it as key. In the same vein, 93% of the participants believed that an increase in research and development would help to resolve the challenges of skill acquisition and technological transfer in the oil sands industry. However, about 7% of those interviewed did not identify an increase in research and development as a solution to the challenge.

Figure 3. How Foreign Direct Investment can Resolve the Challenges of Skill Acquisition and Technological Transfer of the Oil Sands Sector.

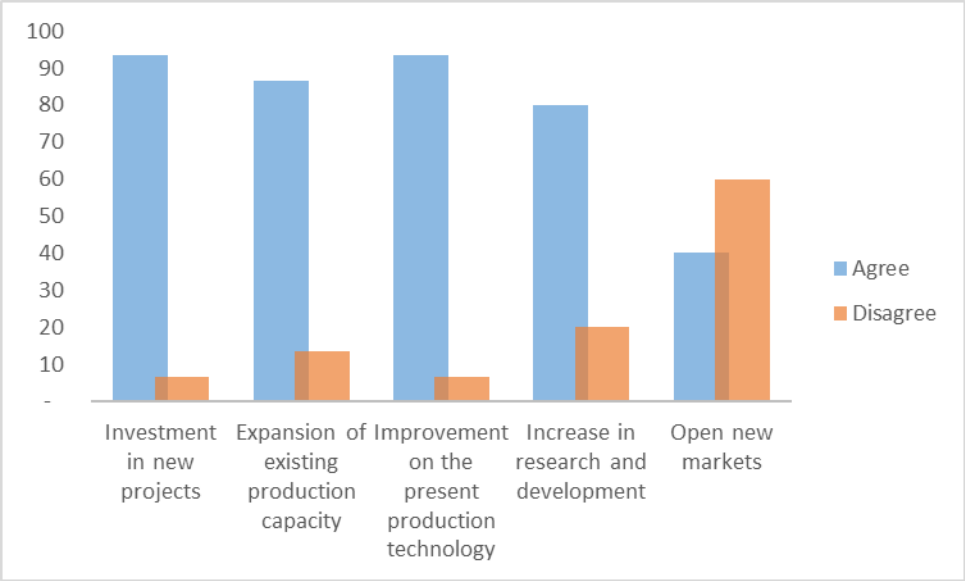

Figure X. Responses to the interview question on how foreign direct investment can resolve the challenges of skill acquisition and technological transfer of the oil sands sector.

Research Question 4

As presented in Figure 4, the participants identified two areas that the various levels of government could use to increase royalties and taxes. All the respondents identified starting of news projects by foreign investors as an avenue to increase both the royalties and corporate taxes due to the government. Also, in Figure 4, about 80% of those interviewed acknowledged that the expansion of existing production capacity is another way the government can generate an increase in royalties and taxes, while 20% of the participants did not mention it in their answer to the question.

Figure 4. How Foreign Direct Investment can Increase the Royalties and Corporate Taxes due to the Government of Alberta.

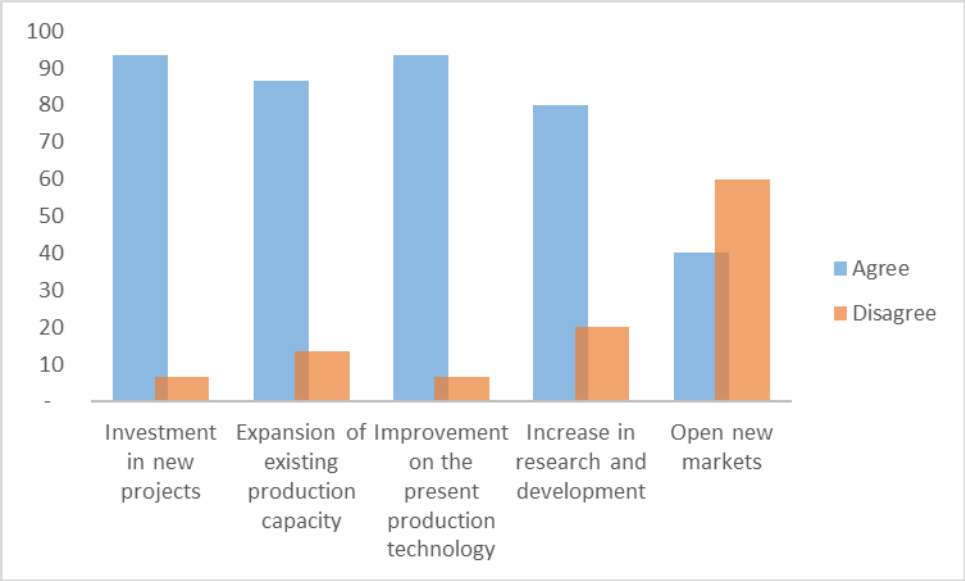

Figure X. Responses to the interview question on how foreign direct investment can increase the royalties and corporate taxes due to the government of Alberta.

Research Question 5

Figure 5 presented the responses of how foreign direct investment can increase employment in the oil sands industry. All the participants believed that foreign inflow of fund would enhance the commencement of new projects that would generate employment. Also, 80% of those interviewed identified the expansion of existing production capacity as another way foreign direct investment could increase job creation, while 20% believed that expansion of existing capacity did not guarantee an increase in employment.

Figure 5. How Foreign Direct Investment can Increase Employment or Job Creation

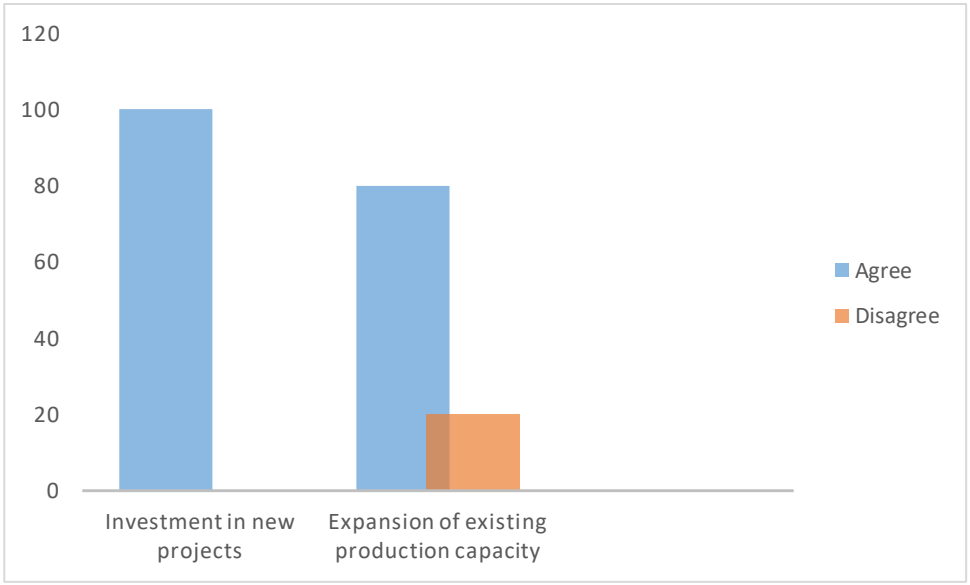

Figure X. Responses to the interview question on how foreign direct investment can increase employment or job creation.

Research Question 6

As presented in Figure 6, the participants identified four areas of how foreign direct investment in the oil sands could improve the quality of workers and increased wages. About 93% of the respondents noted that inflow of capital into the industry would create provision of better infrastructural facilities in the oil sands sites and the surrounding communities. However, 7% of those interviewed did not identify it in their responses. On expansion of government operational bases, only 40% of participants believed that foreign direct investment in the oil sands sector would affect the operation of government. The other 60% did not identify it during their responses.

Figure 6. How Foreign Direct Investment can Improve the Quality of Workers and Translate into Increased Wages.

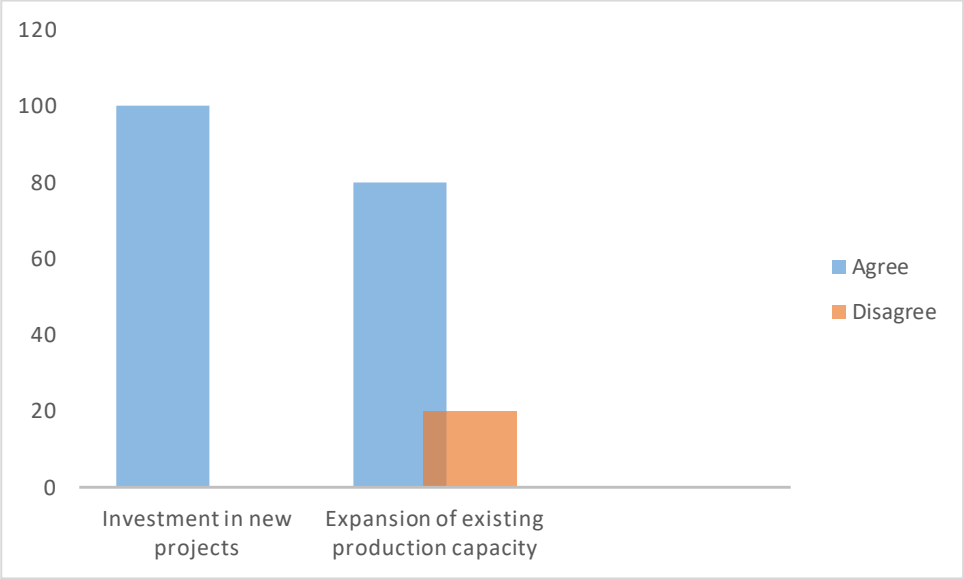

Figure X. Responses to the interview question on how foreign direct investment in the oil sands industry can improve the quality of workers, as well as translate into increased wages.

Regarding competition for the workers' services, about 53% of the participants believed that increased investment in the oil sands industry would create competition for the workforce, while 47% of the respondents thought otherwise. Also, most (about 87%) of those interviewed identified the growth in the gross domestic product (GDP) as a possible effect of foreign direct investment in the oil sands sector. The participants believed that the growth in GDP would lead to the improvement in the quality of life of workers. However, about 13% of the respondents did not identify the growth in GDP as a possible effect resulting from foreign direct investment in the oil sands sector.

Evidence of Trustworthiness

There is a relationship between trustworthiness in the qualitative research and the terms such as credibility, reliability, transferability, dependability, confirmability, and objectivity (Lincoln & Guba, 1985). To ensure that the study passed the trustworthiness test, I used the concept of triangulation.

Credibility

The credibility of data collection method is essential to enhance the quality of the study. Therefore, I adopted the triangulation technique to collect data used in this research. I used data from the case company records, government agencies, and interviews conducted during the data collection period for the study. I also adopted the inductive thematic analysis to process the responses of the participants. The inductive thematic analysis involves the use of rigorous, inductive, pragmatic and straightforward analytical approach to qualitative research (Guest, MacQueen & Namey, 2012). The inductive thematic analysis method consists of a process of reading through word-based data and coding the themes. The inductive thematic analysis involves the interpretation of the structure and content of the themes (Guest et al., 2012). I believe that the use of the inductive research approach for the research enhanced the quality of data analysis and the credibility of the overall study results.

Transferability

The importance of transferability in qualitative research is the assurance it provides the readers about the applicability of the findings to similar situations (Lincoln & Guba, 1985). Most studies in qualitative research are focused on specific issues; it is,

therefore, difficult to generalize results (Leung, 2015). However, with proper strategies such as systematic sampling, triangulation, and proper documentation, it is evident that findings from qualitative research can pass the test of generalization (Leung, 2015).

In my study, I adopted an exploratory qualitative approach using various methods of data collection. The strategies included conducting multiple interviews, review of the company's record and extracting evidence, articles, and reports (Brook et al., 2015; Ndimande et al., 2016; Martínez-Costa et al., 2015 & Mohinder & Sanjeev, 2016). There is a possibility that researcher findings will be consistent with this study by repeating the study using a company in the oil sands industry in Canada as a case study. However, the application of the results of the study to another country that does not have the same socio-political structure like Canada may be challenging.

Dependability

Lincoln and Guba (1985) believed that for a study to be trustworthy, it should show that the results are consistent and researcher can repeat it in a similar context. The methodology section of my study contains a detailed explanation of how I selected the participants, data collection method, and the approach used in analyzing the data. I also have the interview protocol as an appendix to the study. I believe repeating this study is possible if a researcher adopts the same approach.

Confirmability

A researcher can confirm the level of neutrality displayed during the study, as well as evidence showing that the responses from the interviewees shaped the results of

this study. The signed consent forms, the audio files, and the excel spreadsheet files are available for review.

Summary

In the study, I adopted the qualitative case study approach to analyze the effects of foreign direct investment in the development of the oil sands industry in Canada. The findings from the study showed that the oil sands industry is an important segment of the Canadian economy and the main stream of the Alberta economy. The development of the oil sands sector through foreign direct investment has potential to create job opportunities, as well as having ripple effects on other sectors of the economy.

In the next chapter, I provide the conclusion of the study. The Chapter 5 will comprise the interpretation of the study's findings, limitations of the study, recommendations, implications for social change, suggestion for future research and the conclusion summarizing the major findings of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to describe the effects of foreign direct investment in the oil sands industry development in Canada by using a company as a case study. The study involved the use of interviews and a review of documents related to the case study company to collect and analyze data. The study revealed that foreign direct investment could lead to an increase of crude production through new projects or expansion of existing production capacity. Other key findings of the study include the relationship between foreign direct investment in the oil sands industry and job creation, as well as improvement in operational technology and provision of better infrastructural facilities.

In Chapter 4, I analyzed the data collected and presented the results. In this chapter, I present detailed discussion and interpretations of findings, limitations of the study, recommendations, suggestions for future research, and conclusion, as well as the conceptual framework guiding the study as stated in the literature review section. Also, I explain the implications for positive social change.

Interpretation of Findings

Research Question 1

The oil sands industry is the most important segment of the Canadian economy and the main stream of the Alberta economy. The findings from the study revealed that the city of Fort McMurray had been a great beneficiary of the oil sands industry due to foreign direct investment. The sector has impacted the city in areas such as increased population and infrastructural and real estate development. The oil sands industry also

contributed to the increase in revenue of the Regional Municipality of Wood Buffalo, the province of Alberta, and the federal government. The people benefit from the oil sands industry through direct or indirect employment. The Regional Municipality of Wood Buffalo, the Alberta province, and Canada also benefit from the sector through taxes and royalties paid to the government by the companies operating in the industry. The oil sands sector is an employer of labor, and the city of Fort McMurray in Alberta province is the primary destination of engineers in Canada.

As shown in Figure 3, foreign direct investment in the oil sands would lead to jobs opportunities from the employment of workforce through direct or indirect hire. There are ripple effects due to employment creation, such as an increase in revenue to the government and investment in transportation, food, and real estate industries. The ripple effects occur when the workers spend the income earned on goods and services which impact other sectors of the economy. However, foreign direct investment in the oil sands depends on the favorable pricing of the product. The pricing of the crude oil in the international market has a direct bearing on the economic activities in the oil sands industry. When the price of crude oil is high, it impacts activities such as employment and new projects positively, whereas low pricing of the resource has a negative impact on the sector.

The finding of the study is consistent with the published literature on the relationship between foreign direct investment and economic development of the host country (Alfaro & Charlton, 2013; Hymer, 1976; Imoudu, 2012; Sakker et al., 2016).

Research Question 2

The result from the study revealed (Figure 4) that foreign direct investment could contribute to an increase in the crude oil production in the oil sands industry through the starting of new projects, expansion of existing production capacity, use of improved technology, research and development, and the opening of new markets. Most of the participants believed that for the oil sands industry to increase its current crude oil production, companies should introduce new technology. The managers in the oil sands industry should consider changing the current equipment the operators are using to produce crude oil. The information from the case study company revealed that the introduction of modern technology for the bitumen extraction occurred immediately after the takeover by foreign investors. The company also increased its production capacity due to foreign direct investment. Those interviewed suggested that the industry should invest in the right technology to enhance efficient mining operations at a reduced cost. The participants argued that an investment in research and development would enhance the invention of new technology to extract crude oil efficiently

The results in Figure 4 also show that the oil sands industry should open up new markets for the oil sands products, as well as create new distribution channels to reach the target markets to increase the current production. Some of the respondents argued that the distribution of the oil sands product is difficult because Alberta province is land locked; therefore, it is hard to access the market. They believed that the process of getting the crude oil to the consumer is expensive, thereby increasing the total cost of production per barrel. Most of the participants suggested that the government and oil sands industry

policymakers should collaborate to ensure the approval of the Keystone pipeline and the Energy East pipeline projects, as these projects are crucial to the increase in crude oil production of the oil sands sector.

The results for Research Question 2 are consistent with the concept that there is a linear relationship between foreign direct investment and an increase in economic productivity (Girma et al., 2015). Also, the finding is in line with the submission of Olayiwola and Okodua (2013) that foreign direct investment helps local firms acquire the necessary technological know-how and build their production base.

Research Question 3

For this question of how foreign direct investment can resolve the challenges of skill acquisition and technological transfer of the oil sands sector, the participants suggested training and development, research and development, modern technology and collaboration with the higher institutions in Canada as the solution to the challenges of skill acquisition and technological transfer of the oil sands sector. Most of the respondents believed that with foreign direct investment in the oil sands sector, companies would have enough funds to address the issues of skill acquisition and technology transfer.

Some of those interviewed argued that the shortage of local labor due to education and experience made some companies hire foreigners from their home countries. They believed that the Canadian universities were not producing enough workforce to fill management positions and that only a few postsecondary institutions in the country focus on producing the required skills set for the sector. The hiring policy in the industry

focuses on employees with the right experiences and not workers with potential. The sector should consider training and development for its workforce and not concentrate on only experienced workers. With the inflow of funds in the oil sands industry, most of those interviewed stated that companies would have more resources to train and develop their workforce, as well as an increase in collaboration with the postsecondary institutions to ensure that there is no lack of the required skills set. In the same vein, there should be government policies such as the provision of scholarship, grants, or loans to create interest in programs that are relevant to the oil sands sector.

Most of the respondents agreed that acquiring modern technology for the oil sands industry is capital intensive and that foreign direct investment would be of help in solving this challenge. The new technology acquisition should be through a long process of research and development to determine whether to transfer or to develop within. To acquire the right technology to operate efficiently means the focus should not be limited to Canada but to see what other countries can offer to the oil sands industry. There is also the need to consider the cost implications of switching to the new technology. The introduction of new technology takes a while before companies can recoup the cost of investment; therefore, the industry should be ready to accommodate the lag. The participants believed that managers of organizations planning to introduce new technology should consider the current crude oil production, the expected production target, and the technology required to achieve the goal. Researchers from the universities should use the current technologies as a benchmark in developing new equipment for the

industry. The people selected to develop new technology should take into cognizance the environmentally friendly production processes and human capital requirements.

Many participants believed that managers of companies in the industry and government should partner with the postsecondary institutions to constitute think-tank team that would invent technology to drive efficiency in the industry. There should be collaboration among companies operating in the industry to develop new technology to improve extraction of bitumen from the oil sands. There is also a need for investment in research and development, training of the workforce and partnership with the post secondary institutions on the invention of new technology. Presently, Canada's Oil Sands Innovation Alliance is working with many stakeholders including the players in the oil sands industry on innovations to operate efficiently, as well as how to reduce pollution emanating from the oil sands crude oil production.

The finding is consistent with existing literature that foreign direct investment improves host country technology and acts as a vehicle for the transfer of technology (Davies et al., 2016; Okafor et al., 2016 & Sakker et al., 2016). The result also aligns with the views expressed in current literature regarding the effects of foreign direct investment on training, and research and development (Anyanwu, 2012; Burt et al., 2012 & Zekarias, 2016). In the same vein, there was a change in operational focus of the case study company after the take-over. The new management team introduced the new technology for extracting the bitumen from the oil sands. The process also involved training of the workforce to be more efficient and productive.

Research Question 4

Most of the participants identified starting of new projects, and the expansion of existing crude oil production capacity as the ways foreign direct investment in the oil sands sector could increase the royalties and taxes due to the government of Alberta. The commencement of new projects or expanding of existing capacity causes an increase in the crude oil production that attracts additional corporate taxes or royalties to the government. Also, the starting of new projects due to foreign direct investment creates more job opportunities for the people of Canada and other countries of the world. The taxes paid by the workers impact the revenue accruing to the various levels of government.

Guilbeault et al. (2013) and Alberta Government (2014) identified increase taxes and royalties as associated benefits of the oil sands industry development. The finding is also congruent with other literature that the development of the oil sands industry would impact the real sector of the economy through an increase in taxation and royalties due to the government (Herzer, 2012; Imoudu, 2012).

Research Question 5

Most of the participants acknowledged the relationship between increased investment in the oil sands sector and new employment opportunities due to starting of new projects and expansion of existing capacity. The result aligns with existing literature on the effect of the foreign direct investment on employment. Paskey et al. (2013) believed that the oil sands sector plays a major role in the economic growth by employing many people. The government argued that the oil sands development would provide

employment opportunities to many Canadians and foreigners (Alberta Government, 2014). Other existing literature believed that foreign direct investment enhances reduction in unemployment, staffing of new facilities and provides spillover effects on other segments of the economy (Burt et al., 2012; Davies et al., 2016; Sakker et al., 2016).

Research Question 6

The participants stated as shown in Figure 6 that if there is a foreign direct investment in the oil sands industry, it gives room for growth in businesses operating in that segment of the economy. The growth in businesses creates opportunities for hiring more people and payment of good salaries and wages. It also leads to competition for the workforce and a rise in economic activities such as the provision of infrastructural facilities. The employment of more people creates ripple effects on other sectors of the economy such as the real estate, automobile, fashion, electronics, etc. The spending of the income earned by employees helps to lubricate sectors such as the food, clothing, and housing. From the macroeconomic perspective, an increase in business has an impact on the country's gross domestic product (GDP). When there is an increase in business, it causes aggregate demand to increase which also increases expenditure and impacts growth in the GDP. Also, an increase in the GDP causes an increase in the standard of living of the people.

The finding from this question is in line with existing literature on how foreign direct investment impacts on the standard of living of the citizens and country's

economic growth (Anyanwu, 2012; Burt et al., 2012; Paskey et al., 2013 & Ozawa, 1992).

Limitations of the Study

The study had a couple of limitations. I changed the case study design from named company to anonymous company because of the process involved in getting approval from the management. The change limited the level of access I had to only the company's information and records available to the public and what I gathered during the telephone interviews with the employees. Another limitation is the use of case study method for the study. The approach has the problem of generalizing the result of the study due to the peculiar nature of case study method.

The study also suffered limitation in the area of the participants' demographic factors. The sample population included only two female participants, which represented only 13% of those interviewed. The educational level of the participants are Associate Degree and above and did not include people with High School Diploma or the craft workers with Trade Certificates. The study was also limited to the oil sands companies located in Alberta province, Canada.

The global fall in the price of crude oil and the negative effects of the campaign by the environmentalists regarding pollution and the health haphazard of the oil sands production is also a limitation of the study.

Recommendations

The oil sands industry is the most important segment of the Canadian economy and the main stream of the Alberta economy. The oil sands sector has ripple effects on

other sectors of the economy that enhances the country's GDP growth at the macro level. The world economy presently runs on the fossil fuel, and the trend is not going to change for several decades.

The oil sands sector is the creator of revenue for the various levels of government-Federal, provincial, municipal and local aboriginal. These level of government depend on the outcome and successes of the oil sands industry. It is evident that when there is a boom in the oil sands sector, the economies of Canada also experience an upsurge. The price of a barrel of crude oil impacts the value of the Canadian dollar. The pricing of the crude oil in the international market has a direct bearing on the economic activities in the oil sands industry. When the price of crude oil is high, it impacts activities such as employment, new projects, etc. positively; whereas, low pricing of the resource has a negative impact on the sector.

The city of Fort McMurray has been a great beneficiary of the oil sands industry. The sector has impacted the city in areas such as increase in population, infrastructural and real estate development. The oil sands industry also contributed to the increase in revenue of the Regional Municipality of Wood-Buffalo, province of Alberta and the federal government.

In this study, I examined the impact of foreign direct investment in the oil sands industry development in Canada. The results of this research revealed that there is a correlation between foreign direct investment and the development of the oil sands sector. However, there are areas that managers of companies operating in the sector and policymakers in government should consider to reap the huge potential in the oil sands

reserve and for the country to become an important player in the global energy supply in the future. The areas that need urgent attention include the channel for distributing the crude oil produced, the high cost of production, government regulations and environmental concerns.

The Channel of Distribution:

The distribution of the oil sands product is difficult because Alberta province is land locked; therefore, it is hard to access the market. The process of getting the crude oil to the consumer is expensive, thereby increasing the total cost of production per barrel. The industry should find a solution to the problem of distribution of the crude oil produced. The keystone pipeline and the energy east pipeline projects are crucial to the increase of the oil sands sector crude oil production. The approval and signing of the agreement could lead to more production coming out of the oil sands sector, more jobs and increased revenue for the province and country.

High Cost of Production:

The high cost of producing a barrel of crude is one of the challenges facing the oil sands industry. The high cost of production impacts the profit margin of the companies operating in the sector. The crude oil produced from the oil sands is not competitive when compared to the cost of producing a barrel of the conventional crude oil. The decrease in the global oil price has significantly reduced the profit margin of most businesses operating in the industry.

The managers of the oil sands industry should consider changing the current equipment the operators are using to produce the crude oil, as well as the reduction in the

cost of production. The industry should invest in research and development to come up with the new technology to extract the crude oil efficiently. The oil sands managers also need to transfer the administration and operations of the non-crude segments such as the heavy haulage to the third parties. The approach will lead to efficiency, reduction in the cost of operation and profit maximization.

Government Regulations:

There are more rules and regulations identified by the government as requirements for approval for new projects. The introduction of more stringent measures by the government has created an additional level of cost and longer approval procedure. There is also the concept of socializing introduced by the government into the new project approval process. The concept involves how a company relates to the indigenous people or the communities that are close to its operations. A company that plans to start a new project needs to meet the requirements of the interest groups (indigenous and environmental) before the government gives its approval. Socializing involves that organizations wishing to start new projects meet the requirements of the interest groups. The procedure creates bureaucratic problems and lengthens the approval process of new projects.

There is an inconsistency in government policies regarding the oil sands industry. The party in power in the province and federal due to ideology differences also play a role in the pace of development of the oil sands. A conservative party led government at the provincial and federal is favorably disposed to the development of the oil sands

industry while the liberal party led government is much concern with the environmental impacts.

The oil sands managers should have a pragmatic shift by considering the aboriginal groups as business partners or investors in the industry. The approach will increase socializing and enhances the quick approval of new projects. The government regulations regarding safety should be reasonable and achievable. The government needs to relax some of the operating rules especially the approval process to start new projects in the industry to increase the crude oil production.

Environmental Concern:

The deterioration in environmental condition due to the activities of businesses operating in the industry is a major concern. The destruction of the land, animals, and birds in the oil sands producing areas, as well as the danger the industry poses to human beings are reasons the environmentalists are campaigning against the operations of the oil sands industry. The environmentalists have labelled the crude oil produced from the oil sands as dirty oil. The appellation has a negative impact on how the global market perceives the crude oil from the oil sand sector. However, some of the operators in the oil sands sector believe that the claim by the environmentalists concerning pollution is not true as most companies operating in the sector have measures in line with the government regulations to reduce the impact of bitumen extraction on the people and environment.

The managers of companies in the industry should consider ways that the extraction of bitumen would not harm the environment, as well as ensure the land is usable after mining to attract investors to the oil sands sector. The operators in the

industry should work towards reducing the impact of bitumen extraction from the oil sands on the environment, as well as the elimination of deaths or serious injuries from the crude oil production sites. Also, the industry should increase its environmental consciousness in the production process, as well as introduce environmental friendly ways of extraction the bitumen to attract new markets and wider acceptance.

The sector needs to work on its environmental blue print that addresses most of the concerns of the environmentalists. The more industry shows concern for the environment, it becomes more attractive and sways investors to the industry. There is also the question of reclamation of mining land. The oil sands practitioners need to focus more on the process of restoring land where mining took place to its natural or economically usable state.

Suggestions for Future Research

The study is a follow-up to Giaccheta et al. (2015) research on the economic justification of investment in the oil sands sector. The finding from this study revealed the importance of the introduction of modern technology in the industry to achieve the goal of increase production and becoming a major player in global energy supply. The introduction of improved technology would bring challenges of using fewer workers in the industry. I suggest that further studies investigate the effects of the introduction of new technology in the oil sands industry on employment and government revenue.

The sensitive nature of the oil and gas industry to the Canadian economy has an impact on the strategies to attract foreign investors. It is important that the government of Canada and the province of Alberta craft strategies that would encourage investors to the

sector. I recommend that future studies consider the strategies to attract foreign direct investment to the oil sands industry

I also suggest that more research is carried out on how the promotion of a friendly environment can influence foreign direct investment in the oil sands industry.

Implication for Positive Social Change

There is a relationship between foreign direct investment, the development of the oil sands industry and positive social change. The recommendation section of this study has suggestions that if implemented would contribute to positive social change. The development of the oil sands industry through foreign direct investment has associated positive social change. Anis and Siddiqui (2015) suggested that the oil industry must consider the environment sustainability along economic growth as their contribution to the positive social change. The achievement of sustainable development is an important step in the development of the oil sands sector.

There are economic benefits associated with the development of the oil sands industry. Foreign direct investment in the oil sands industry would lead to starting of new projects and the expansion of existing production capacity. Also, the approval and signing of the Keystone pipeline and the energy East pipeline projects agreements would enhance an increase in the oil sands sector crude oil production. The development of the oil sands industry creates employment opportunities for the citizens of Canada, the US and people from different countries in the world. Other economic benefits include an increase in taxes and royalties to the three-tier of government, the improvement of the

standard of living of workers in the oil sands producing areas, provision of better infrastructural facilities and improvement in the gross domestic product.

I am hoping that my study would elicit more interest to the oil sands industry from the government and prospective foreign investors. Also, I believe that this research would encourage other scholars to engage in further study of the oil sands development.

Conclusions

The projected rise in the global energy demand, expected population increase and the desire of an improved standard of living of people in the third world countries make the oil sands sector a strategic industry to investors. Canada has a conducive political environment that attracts investors to the country. Apart from the country having an enabling environment, the managers of the oil sands sectors should ensure that there are positive returns on investment. The managers of the industry should ensure investment in the industry is profitable with efficient management of resources.

The managers of companies in oil sands industry need to embark on sensitization of the public on the benefits of investing in the oil sands sector. The public enlightenment would bring to fore operations of the industry, as well as the long-term nature of the capital investment in the sector. The managers of companies in the oil sands industry should place advertisements in the various media segments, as well as organize stakeholders' forum and trade shows both locally and internationally where discussions focus on the activities of the sector.

The oil sands practitioners need to show to the investors that the environmental issues are receiving attention and that plans are in place to ameliorate the effects of the

bitumen extraction on the people and communities around the production sites. The firms operating in the industry should introduce technology that produces cleaner crude oil, reduces pollution and environmental haphazard and lowers the cost of extracting the bitumen from the oil sands.

The alternative energy is proving to be a strong competitor to the oil sands industry. The green energy campaign is likely to be more audacious in a couple of years. The industry is likely to face more challenges in the next few decades due to the issue of alternative energy. However, it does not mean that the crude oil will become irrelevant, as it would still play a role whether significant or not. The oil sands sector is an industry with huge potential and with many economic benefits. It is just a matter of time before the oil sands sector would receive its due attention and it is going to be a surviving industry for a long time.

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Appendix A: Interview Protocol

The Effects of Foreign Direct Investments on Oil Sands Industry Development in Canada

Time of Interview:

Date:

Place:

Interviewer:

Interviewee:

The position of the Interviewee:

A brief description of the Study:

Questions

1. What are your views on the oil sands sector?
2. What are the economic benefits of the oil sands industry?
3. What are the biggest challenges facing the Alberta oil sands industry?
4. What roles can the oil sands play in the global energy supply?
5. How can the oil sands industry increase its current crude oil production?
6. How can the activities of the oil sands industry influence investors' decision?
7. What strategies can the oil sands sector implement to attract foreign investors?
8. What are the obstacles to the acquisition of relevant skills in the oil sands industry?
9. How can the oil sands sector acquire the right technology to operate efficiently?

10. How can increased investment in the oil sands be beneficial to the people and government of Canada?
11. How do you see the oil sands industry in the next few decades?